

DISCURSIVITY OF NURSING PROFESSIONALS ON LIGHT TECHNOLOGIES IN ASSISTANCE TO HOSPITALIZED PATIENTS WITH COVID-19

DISCURSIVIDADE DE PROFISSIONAIS DE ENFERMAGEM SOBRE TECNOLOGIAS LEVES NA ASSISTÊNCIA A PACIENTES HOSPITALIZADOS COM COVID-19

DISCURSIVIDAD DE PROFESIONALES DE ENFERMERÍA SOBRE TECNOLOGÍAS LIGERAS EN LA ASISTENCIA A PACIENTES HOSPITALIZADOS CON COVID-19

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Objective: to understand the use of light technologies by nursing professionals in the care of hospitalized patients with covid-19. Method: qualitative study, developed with 23 nursing professionals, from reference hospitals for care of people with covid-19, between May and June 2021. The data collection technique used was semi-structured interview. The theoretical-analytical framework of Discourse Analysis, of French matrix, was used. Results: the discursive training of health needs of people hospitalized with covid-19 was developed from the perspective of nursing professionals; nursing care for hospitalized patients with covid-19 and technologies used; difficulties faced in nursing care for hospitalized patients with covid-19. Final considerations: nursing professionals could not identify the light technologies in their care practices, although their discourses revealed traces of the use of these technologies in their daily work.

Descriptors: COVID-19. Nursing. Health Technologies. Humanization of Care. Patient-Centered Care.

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Objetivo: compreender a utilização de tecnologias leves por profissionais de enfermagem na assistência a pacientes hospitalizados com covid-19. Método: estudo de abordagem qualitativa, desenvolvido com 23 profissionais de enfermagem, de hospitais de referência, para atendimento de pessoas com covid-19, entre maio e junho de 2021. A técnica de coleta de dados utilizada foi entrevista semiestruturada. Utilizou-se o referencial teórico-analítico da Análise de Discurso, de matriz francesa. Resultados: elaboraram-se as formações discursivas necessidades de saúde de pessoas hospitalizadas por covid-19, na perspectiva de profissionais de enfermagem; cuidados de enfermagem aos pacientes hospitalizados com covid-19 e tecnologias utilizadas; dificuldades enfrentadas na assistência de enfermagem aos pacientes hospitalizados com covid-19. Considerações finais: os profissionais de enfermagem não conseguiram identificar as tecnologias leves em suas práticas de cuidados, embora em seus discursos tenha sido identificado traços da utilização dessas tecnologias no seu cotidiano de trabalho.

Descritores: COVID-19. Enfermagem. Tecnologias em Saúde. Humanização da Assistência. Assistência Centrada no Paciente.

Objetivo: comprender el uso de tecnologías ligeras por profesionales de enfermería en la asistencia a pacientes hospitalizados con covid-19. Método: estudio de abordaje cualitativo, desarrollado con 23 profesionales de enfermería, de hospitales de referencia, para atención de personas con covid-19, entre mayo y junio de 2021. La técnica de recolección de datos utilizada fue entrevista semiestructurada. Se utilizó el referencial teórico-analítico del Análisis de Discurso, de matriz francesa. Resultados: se elaboraron las formaciones discursivas necesidades de salud de personas hospitalizadas por covid-19 y tecnologías utilizadas; cuidados de enfermería a los pacientes hospitalizados con covid-19 y tecnologías utilizadas; dificultades enfrentadas en la asistencia de enfermería a los pacientes hospitalizados con covid-19. Consideraciones finales: los profesionales de enfermería no consiguieron identificar las tecnologías ligeras en sus prácticas de atención, aunque en sus discursos se identificaron rasgos de la utilización de esas tecnologías en su cotidiano de trabajo.

Descriptorios: COVID-19. Enfermería. Tecnologías en Salud. Humanización de la Atención. Atención Centrada en el Paciente.

Introduction

Since the emergency in China in December 2019, regarding the emergence of the Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2), responsible for the pandemic of Coronavirus disease 2019 (covid-19), humanity has faced a serious health crisis. According to the World Health Organization (WHO), from the beginning of the pandemic to February 15, 2023, there were 756 million cases and 6.8 million deaths. In Brazil, 36.9 million confirmed cases and more than 697 thousand deaths have been recorded⁽¹⁻²⁾.

Although most infected people have mild or moderate symptoms (80%), there is also the development of the severe form of the disease, being about 15% of cases, in which the patient needs support with oxygen, and another 5% evolve to the critical form of the disease, requiring care in an intensive care hospital environment⁽³⁾. Care is a sum of decisions regarding the use of health work technologies, which must be articulated with objective and subjective care,

and the clinical and personal needs of each individual, to achieve better care for patients in this environment⁽⁴⁾.

The technologies involved in health work are interrelated and are classified into three types: hard technologies, which are represented by technological equipment and instruments, such as respirators and heart monitors in the context of severe cases of covid-19; the light-hard technologies, which are expressed in the structured technical-scientific knowledge of the health area and in the performance of procedures; and the light technologies, existing in the relational productive act between health worker and user, that translate into the production of communication, embracement, solidarity bonds, trust and autonomy of users, characterizing living work in the act, which occurs in the micropolitics of the health work process⁽⁵⁾.

Nevertheless, limitations in coping with covid-19 cases and various health technologies have been used in the management and care

of people with the disease. The care provided to hospitalized patients should be performed considering not only the pathophysiological aspects of the disease, but also their psychosocial, environmental and family issues, since these are also related to their clinical condition⁽⁶⁾.

Thus, it is evident the need for the use of light technologies by health professionals in the care provided to those who are hospitalized. The use of these relational/light technologies also promotes the autonomy and protagonism of users, increasing the level of co-responsibility in the production of their own health⁽⁷⁾.

Therefore, in the micropolitics of assistance to hospitalized patients with covid-19, it is assumed that there has been a focus on hard and light-hard technologies to the detriment of light technologies. According to Merhy⁽⁶⁾, when this happens, there is a low effectiveness in the resolution of health services, since health problems are simplified and reduced to the biological dimension, directing attention to affected organs, signs and symptoms of the disease and construction of reductionist and partial therapeutic projects.

Thus, given the pandemic of the new coronavirus, it becomes important to study light technologies in nursing care for patients who are hospitalized. There are still gaps in the published literature on the subject. Therefore, the objective of this research was to understand the use of light technologies by nursing professionals in the care of hospitalized patients with covid-19.

Method

This is a qualitative study, which followed the recommendations of Consolidated criteria for reporting qualitative research (COREQ)⁽⁸⁾. The manuscript is the result of a scientific initiation project, entitled "Use of light technologies in nursing care for hospitalized patients with covid-19", conducted during 2020/2021. The research was carried out in the city of Campina Grande, the largest city in the countryside of Paraíba, in public hospitals of reference for the care of adults with the most severe forms of covid-19,

which are: Hospital Municipal Pedro I (main reference hospital) and Hospital Universitário Alcides Carneiro (HUAC). Both provide care to their residents and those from other 69 cities in Paraíba in the assistance of cases of covid-19, belonging to the second health macro-region of the state, which has a population of approximately 1.2 million inhabitants⁽⁹⁾.

The population of this study consisted of nursing professionals, nurses and nursing technicians, who work in the aforementioned hospitals in the city of Campina Grande. The sample was obtained by convenience, ease of access to the study scenario and intentionally, so that there was equivalence between the research participants as to their professional category. The number of participants was delimited by the technique of theoretical saturation or information redundancy, in a continuous process of analysis from the beginning of data collection, to the reach of density and understanding of the research object, which was observed through peer evaluation, ending the sample in the 23rd interview⁽¹⁰⁾.

The following inclusion criteria were considered: nurses and nursing technicians who provided care to hospitalized adult patients with covid-19. It was decided not to limit the time of operation, so that the maximum possibilities of participants would be expanded, since the collection occurred still in a critical period of the pandemic. Professionals who were on sick leave or away from work for another reason during the data collection period were excluded from the study. The professionals were approached personally in their workplace by the researcher, who was graduating from Nursing and a scholarship student of scientific initiation, after theoretical and practical training with the researcher in charge, PhD in Nursing. Of the professionals invited to the study, there was only one refusal, due to the high work overload at the time of collection. The interviews were conducted in a hospital room, with only the researcher and the interviewee present, as a way to preserve the privacy of the participants. Thus, 12 nurses and 11 nursing technicians were interviewed in

both hospitals, in the sectors of medical clinic, intensive care unit and infectology.

The technique of data collection was through an interview, of the semi-structured type. The script with the research questions, prepared by the researchers, was used, which included seven questions about the possible health needs of hospitalized people with covid-19 and the health technologies used by nursing professionals in the care provided, focusing on light technologies. Other questions included the identification of psychological or spiritual support, the relationship of the professional with patients and their families and the care of a patient who died.

The interviews had an average duration of 10 minutes and were performed after written consent, being recorded by acquiescence of the study participants and later transcribed by the researcher. There was no need to repeat interviews. The researcher used a field diary to record observations about the scenario and about the non-verbal communication of the interviewees. Data were collected between May and June 2021.

The theoretical-analytical reference used was Discourse Analysis (DA), of French matrix. The creator of DA, in the Social Sciences, is the French philosopher Michel Pêcheux. For Orlandi (Pêcheux's disciple), DA is a critical theory that addresses the historical determination of signification processes and considers the relationship between language and its production context as a central focus. Furthermore, it reveals that there is no discourse without subject or subject without ideology and emphasizes that language constitutes a social space for debate and conflict⁽¹¹⁾.

DA aims at understanding how a symbolic object produces meaning. The first stage is the constitution of the corpus, defining its limits, making cuts and starting the analysis work from the resumption of concepts in a constant come-and-go between theory, corpus consultation and analysis, transforming the linguistic surface in the discursive object. The second stage is the passage of the discursive object to the discursive

process, from the observation of the meanings of the text. This stage consists of the relationship of discursive formations with ideological formations, which provides the understanding of how the meanings of saying are constituted⁽¹²⁾.

This research met the requirements of Resolution CNS 466/2012 and the project was submitted to the Research Ethics Committee (REC) selected by the National Research Ethics Commission (CONEP), through Plataforma Brasil, with CAAE of n. 40344320.7.0000.5182. The REC of the Hospital Universitário Alcides Carneiro of the Universidade Federal de Campina Grande (HUAC - UFCG) approved the project, according to Opinion 4,569,376, of March 2, 2021.

The participation of the subjects of this research was supported by the Informed Consent Form, being guaranteed the anonymity of the interviewees, as provided by the referred resolution. In order to ensure this anonymity, the study participants, nurses, were called N1, N2 and so on, the nursing technicians, T1, T2 and so on, according to the sequence of interviews.

Results

Three discursive formations were elaborated, namely: Discursive Formation I - Health needs of people hospitalized for covid-19, from the perspective of nursing professionals; Discursive Formation II - Nursing care to hospitalized patients with covid-19 and technologies used; and Discursive Formation III - Difficulties faced in nursing care to hospitalized patients with covid-19.

Characterization of the research participants

Regarding the characterization of the research participants, of the 23 nursing professionals interviewed, the majority were female, corresponding to 20 (87%) of the participants; 22 (96%) of the participants were aged between 25 and 49 years; 9 (39%) were married or in a stable union; 18 (78%) had schoolchildren; 17 (74%) were catholic; 13 (57%) had completed higher

education. Concerning the health vulnerability conditions of the interviewees, 3 (12%) of them reported some chronic disease and 9 (39%) were directly responsible for the care of one or more vulnerable people.

In relation to the length of service in the hospital, 13 (57%) of the professionals worked for a period of up to six months in the position; 15 (65%) were temporarily hired; 9 (39%) completed graduate or technical course between 2015 and 2021; 12 (52%) attended or were attending a postgraduate course; among the postgraduate areas, the area of Urgency and Emergency stood out, being reported by 7 (30%) participants.

Discursive Formations

Discursive Formation I – Health needs of people hospitalized for covid-19, from the perspective of nursing professionals

Nursing professionals were asked about the identification of the health needs of people hospitalized with covid-19 for whom they have already provided assistance, composing the Discursive Formation I, with its discursive fragments presented in Charts 1 and 2.

Chart 1 – Discourses of nursing professionals regarding the psychosocial and psychobiological needs of people hospitalized for covid-19. Campina Grande, Paraíba, Brazil – 2021

Discursive sequences	Discursive fragments
Psychological suffering related to the diagnosis of covid-19	If I have already identified? Yes. There are many patients who come here [...] extremely shaken spiritually, psychologically [...] and sometimes this even makes the treatment itself more difficult (N1).
	The greatest suffering I see in patients who are sick with covid is the psychological suffering, they get depressed, they get psychologically down [...] (N11).
Anxiety in coping with the disease	[...] We see that many patients arrive here with anxiety, very nervous, and that sometimes ends up harming you, right? In their clinical response (N5).
	More anxiety, it's more about that, a lot of anxiety, a lot, patients are very anxious [...] We often say: "ah, it's desaturating", taking into account the symptoms of covid, but many times it's due to anxiety [...] (N4).
Suffering arising from the separation from family members	I think the biggest difficulty for them is the distancing from the family, because as they can't have the family together, family members can't visit, that's where they most find the difficulties, I believe that [...] (T11).
	[...] When I arrived, there was a patient who, when I went to visit her, I started seeing her, she went into an anxiety crisis, where she cried a lot and all the time she mentioned that her greatest need was her family [...] (N7).
Loneliness	[...] They are generally alone, so naturally they feel very lonely. There are only us here [...] to talk, so sometimes they really feel the need to talk [...] (N5).
	We realize that people are very needy, despite the isolation we are experiencing, so when they get sick they are already in that distance, right? Without seeing many relatives, family members, then they are even needier, and I understand that this favors and helps to decompensate more quickly (T8).
Focus on respiratory symptoms and rapid disease progression	It's just the shortness of breath, when he starts to desaturate, and fever, he arrives here with a fever, coughing a lot, the saturation drops, but what affects him is tiredness, shortness of breath, of breathing (T3).
	[...] They are super secretive and need more help, and we saw that patients who are tracheostomized, they have a very fast evolution [...] (N8).

Source: Created by the authors.

Chart 2 presents the perceptions and discourse of nursing professionals regarding the identification of the psychospiritual needs of people hospitalized with covid-19.

Chart 2 – Discourses of nursing professionals in relation to identifying the psychospiritual needs of people hospitalized for covid-19. Campina Grande, Paraíba, Brazil – 2021

Discursive sequences	Discursive fragments
Spirituality of patients with covid-19	They ask us to say prayers, to pray, to put on music, praise, I've witnessed it until they ask a priest to come to the bed [...] (N2).
	Most have a rosary, or some saint [...], they are always in prayer, they are always speaking God's word [...] (N6).
	They get very sentimental, depressed, they cry a lot. Now spiritual I have never paid attention (T2).
	When they come, they come very, very stressed, not spiritual, I've never assisted a spiritual [...] (T4).
Fear of a worse prognosis and death	[...] Some isolate themselves before coming to the hospital, afraid of dying, afraid of being intubated [...] (T6).
	[...] They already come with that idea, in their minds that they are going to die, so, since they are going to die, why are they taking that? That's where the psychologist comes, no matter how hard we try, they don't listen at all (T4).

Source: Created by the authors.

Discursive Formation II – Nursing care to hospitalized patients with covid-19 and technologies used

Hospitalized patients with covid-19 have anguish, fear, depression, signs and symptoms of the disease, as well as intense respiratory distress. They also need spiritual care, being

important markers of worse disease progression, thus needing comprehensive care that meets all these needs. In this sense, participants were also asked about the nursing care they offer to hospitalized patients with covid-19, to meet the demands of their patients in their multiple needs. Chart 3 indicates the discursive sequences and the discursive fragments of this perspective.

Chart 3 – Discourses of nursing professionals in relation to the care provided to patients hospitalized with covid-19. Campina Grande, Paraíba, Brazil – 2021

(continued)

Discursive sequences	Discursive fragments
Light-hard and hard technologies used by nursing professionals	[...] We observe the saturation, if it is lowered, we have to change, if there is an environment, we put a nasal catheter, from a nasal catheter, which can evolve to a reservoir mask,... access, medications, then opening hours too, and ... only in this main care (N2).
	[...] In general, there is nursing care and medication administration, a lot of observation in dosage [...] (T7).

Chart 3 – Discourses of nursing professionals in relation to the care provided to patients hospitalized with covid-19. Campina Grande, Paraíba, Brazil – 2021 (conclusion)

Discursive sequences	Discursive fragments
Light technologies used by nursing professionals	[...] I always try to talk to the patient, offer psychological support, which I believe are tools that make all the difference [...] The issue of putting yourself in the other's shoes. Using empathy, knowing how to listen, always communicating clearly and objectively, explaining to him the importance of self-help, having faith. I think faith moves mountains and that helps in a way, [...] I believe that creating a bond with the patient is extremely important, it changes a lot and helps him in this rehabilitation process (N7).
	In addition to technical care, I mainly provide care like this, the issue of attention [...] and you get there, a simple good morning when we arrive: "good morning, how are you?" [...] our role is fundamental, in this issue of attention even with them, in addition to medication, food, technical care [...] I'm always reinforcing with them, the issue of hope, positivity. That this also helps in other processes: "let's eat, because God doesn't want you here sick. We want you to go home." (N6).

Source: Created by the authors.

Discursive Formation III – Difficulties faced in nursing care to hospitalized patients with covid-19

Regarding the difficulties faced in the routine care of patients with covid-19, nursing

professionals reported the high level of overload due to overcrowding of hospital beds, the constant lack of materials, services and the fear of illness in the face of the assistance provided to patients, presented in the discursive fragments present in Chart 4.

Chart 4 – Discourses of nursing professionals in relation to the difficulties faced in nursing care for patients hospitalized with covid-19. Campina Grande, Paraíba, Brazil – 2021 (continued)

Discursive sequences	Discursive fragments
Overload resulting from overcrowding	[...] The difficulty at this moment is the overcrowding of the service. That ends up making it hard for us sometimes. [...] I've stayed in other wards, with fifteen patients for one nurse, so sometimes it ends up being overloaded, and you can't provide 100% care for all fifteen patients, so that ends up being a hard. The overcrowding of the service, which is a reality that unfortunately we have to live with until this pandemic subsides [...] (N5).
	[...] Regarding professionals, during this pandemic we are very tired, very exhausted, both physically and emotionally, one works here, works elsewhere, is in a rush from one corner to the other and really, sometimes, not at all cases, sometimes the assistance is a little impaired, but in the others we take care of it (N8).

Chart 4 – Discourses of nursing professionals in relation to the difficulties faced in nursing care for patients hospitalized with covid-19. Campina Grande, Paraíba, Brazil – 2021 (conclusion)

Discursive sequences	Discursive fragments
Deficit of materials and inputs	[...] Here the availability of material is not enough for what we need. I have the technical knowledge, I know what you need, but what the hospital has is not what we need. We often ask permission from the management to ask the family members to provide and buy the necessary material outside, so the difficulty is the material [...] (N9).
	[...] Sometimes there is a lack of material, sometimes PPE is missing, unfortunately, not all of them, but one thing or another is missing (T9).
	The lack of material. It's not enough, many times you have to work on improvisation, so I think that the difficulty we feel the greatest is this [...] (T11).
Fear of illness	The biggest thing is the fear, the fear of taking care, because of the disease, no matter how much we prevent ourselves, take care, we know that at some point there will be a mistake, I'm scared to death [...] (T9).
	[...] The fear of acquiring the disease and taking it home, because we have our other lives out there, we have children, we have a husband, we have family out there, so I think fear is the most complicated part for us to deal with, we try to dribble, but the fear is still present, I think every day (T10).

Source: Created by the authors.

Discussion

In discourse analysis, the identification of the conditions of production of discourses is necessary to understand the production of meaning in the discourse of the subjects. In this perspective, for Orlandi⁽¹²⁾, the conditions of production basically comprise the immediate conditions, which refer to the scenario of production and the broad conditions, which comprise the social, historical and ideological context.

In the present study, the following broad conditions were identified: epidemiological transition from becoming ill with covid-19; high morbidity and mortality in the covid-19 pandemic; beginning of vaccination against covid-19 of the Brazilian population; prevalence of biomedical ideology, hospital-centered and curative, in the context of assistance to patients with the disease; high risk of contamination, illness and death from covid-19 for health professionals; intense psychological suffering; professional devaluation of nursing; the frequent dissemination of fake news related to the pandemic; increased socioeconomic vulnerability and social inequities.

Immediate conditions include: scarcity or inadequacy of personal protective equipment (PPE); technical unpreparedness of nursing professionals; collapse of health services and maximum occupation of hospital beds; overwork and physical and emotional exhaustion. Moreover, the scenarios of the study were a school hospital and a municipal hospital, which had a deficit of hospital materials, mainly PPE, and performed temporary hiring for specific assistance to patients with covid-19.

The identification of these broad and immediate production conditions enabled a more in-depth and contextualized analysis of the object of the research, influencing the discourse of professionals and reflecting the discursive memory so recently built by the collective about the covid-19 pandemic.

Although the ideological context in the Brazilian health area is still centered on biomedical ideology, with emphasis on the biological needs of patients, most discourses of nursing professionals reveal that, in addition to identifying signs and symptoms related to covid-19, professionals highlight

the psychosocial needs that patients present, indicating that there is an understanding of these multiple needs, which points to an ideology of comprehensive care.

Given the measures to prevent the spread of the virus, one mentions the suspension of companions in a hospital environment, which causes feelings of loneliness, reported in the speeches. Thus, during the hospital isolation period, patients with covid-19 may have difficulties in adapting to the environment, as well as concern about the prognosis of the disease, which can cause a number of psychological problems or adverse psychiatric reactions among them⁽¹³⁾.

From the understanding that the mental and emotional components directly affect the recovery of patients, the professionals' discourses also unveil the recognition of the need to promote support and comfort behaviors for these patients, even after recovery.

In this context of pandemic, of distancing and social isolation, communication tools play an important role in the strengthening of the patient-family relationship, given that the reduction of distance, even though virtual means, can play a decisive role in supporting and strengthening strategies to cope with the disease, reducing the burden of suffering arising from the social dimension, as well as being a listening channel for users, serving as the basis for the promotion of care appropriate to the patient's preferences in order to improve the humanization of care⁽¹⁴⁻¹⁵⁾.

Covid-19 is a debilitating disease that causes signs and symptoms associated mainly with the respiratory system. In the discourse of the subjects, fatigue, shortness of breath, cough, fever, body pain and low saturation in patients with covid-19 are identified as clinical manifestations of the disease often linked to psychological and social suffering. The speeches also highlight the rapid evolution of the disease to more severe conditions, in which there is the imminent risk of death.

The fear of disease, decompensation and not being able to breathe can further aggravate the respiratory condition of these patients,

generating a high dependence of professionals by patients. This intense biological suffering is strictly associated with the psychological suffering arising from the broad and ideological condition surrounding the covid-19 pandemic, due to the great uncertainty surrounding the prognosis⁽¹⁶⁾.

Most respondents revealed in their discourses that spirituality is intrinsic and integrates the various dimensions of health care, as well as used as a resource in coping with covid-19, because it is part of the struggle for survival and resilience in this pandemic scenario.

On the other hand, other discourses diverge and confront others, pointing out that there is a psychological suffering, but that never identified spiritual suffering in patients, which can be translated into traces of biomedical ideology, since the imperceptibility of this type of need reveals a forgetfulness of these subjects related to psychospiritual needs, which can lead them not to assist this sphere of life of these patients.

It is important to emphasize that the absence of spirituality and/or religiosity expressed by patients and professionals should also be respected and considered. In this sense, people without religious affiliations may present beliefs that transcend the spiritual or religious, and may present them as beliefs in ethical actions, connection with nature, philosophical arguments or complementary and meditative practices. The recognition of diversity and respect should be the foundation of the relationship between professional and patient⁽¹⁷⁾.

The identification of the multiple health needs of hospitalized people with covid-19 is an important premise for the promotion of biopsychosocial spiritual well-being, requiring a look and an integral action from nursing professionals, adding, beyond biological needs, social, psychological and spiritual needs. The answers to meet these multiple needs are intrinsic to the use of light technologies during nursing care, and the difficulties for their identification by professionals can be a determining factor for the fragmentation of care, with emphasis on hard

and light-hard technologies, since they follow the paradigms of vision and biomedical practice.

Nursing professionals were asked if they knew what light technologies were, they could not answer and could not identify them in their care practices, being mostly understood as the use of equipment, computers and applications. Although the interviewed professionals do not know the meaning of light technology in their discourses, they use these technologies in their daily work, so that they unveiled the discursive memory of the comprehensiveness of health care and a care centered on the multiple needs of hospitalized patients with covid-19.

The discursive fragments identified the following care, identified as light technologies: conversation; psychological support; welcoming physical presence; transmission of words of encouragement, hope and positivity; stimulation of self-care, autonomy and independence; empathy; listening to what the patient has to say attentively; patient-centered care; clear and objective communication; spiritual strengthening; creation and strengthening of a bond of trust; observation of the particularities of each patient and promotion of comfort.

In this sense, it is necessary a change in the way of managing and conducting work processes, in a way that aims to understand, embrace, connect and take responsibility for individuals by these professionals. Therefore, nursing professionals must be prepared in theoretical terms, since it is essential to review and evaluate critically and strategically the processes of management of care, in order to create a new organizational reality for the proper use of different types of technologies to meet the subjective dimensions of interpersonal relationships⁽¹⁸⁾.

Light technology is considered the guiding thread of the initial analysis of the professional on a given situation, since it enriches and broadens the clinical reasoning, guiding the use of other technologies, knowledge and machines, involved in the health work, allowing the existence of the other in their uniqueness and that the health professional work with creativity in health care, allowing aspects related to the embracement, the

establishment of bond, as well as the monitoring of therapeutic projects consolidated in the work environment, which ensures safety to the patient and their family in terms of meeting their needs, representing a relationship between the concepts of humanization, accountability, embracement and comprehensiveness⁽¹⁹⁻²⁰⁾.

In relation to the difficulties faced in nursing care to hospitalized patients with covid-19, the discourses reveal the physical and psychological fatigue before the overload of nursing professionals, as well as the health services generated by the total occupation of beds, due to the advance of the number of confirmed cases and the number of hospitalizations, where the deficit of materials reported by the subjects is also linked. Still in this sense, fear is one of the main difficulties faced with assistance to hospitalized patients with covid-19, in view of the high transmission of the virus and the high mortality caused by the disease.

The discursive fragments unveil the condition of wide production, since the overload resulting from work in more than one hospital unit is reported. This double working day exposes the professional to fatigue, wear and overload and can cause or aggravate diseases and psychological suffering, as pointed out in another study conducted in the same line of the evidence presented⁽²¹⁾.

The subjects also reported the deficit or inadequacy of equipment, inputs and PPE for assistance in the face of the pandemic demand. There were recommendations for prolonged use of PPE during the covid-19 pandemic, as well as recommendations on the reuse of some of these items. Once the lack of materials is identified, professionals feel insecure in the face of assistance, provoking mistrust, doubt, uncertainty, restlessness and fear in the face of the high risk of infection with the virus and the lack of support and inadequacy of PPE⁽²²⁻²³⁾. The great fear is not only to be contaminated, but to transmit the virus to family members.

Associated with the fear of contamination is the precarious working conditions to which these professionals are exposed, such as highly

stressful work environments, requirements of employers, weakened employment relationships and high demand for productivity. Thus, it can be understood that the greater the productive power of labor, the greater the pressure of workers, and therefore the sale of labor power becomes more precarious. This leads to the increase of the wealth and profit of the master or the appreciation of capital. Consequently, the quality of assistance to the population facing this critical situation will be even lower⁽²⁴⁾.

The collapse of the service generates great consequence in nursing care to patients, since the professional has to meet a high demand of patients, reducing the quality of care and making it difficult to identify and meet the multiple health needs presented⁽²⁵⁾.

As a limitation of the research, one points out that, to avoid infection by the virus, it is necessary to use multiple PPE, which was shown as a physical barrier in the identification of facial expressions in the data collection, used as a form of expression of concepts, assisting the researcher in the analysis of the subjects' discourses.

Final considerations:

This research identified traces of light technologies that meet the multiple needs of hospitalized people with covid-19. These light technologies should guide and permeate all moments of the process of caring for hospitalized patients with the disease, in order to ensure the completeness of care.

Although the discourses reveal ideologies that focus on the holistic view of the individual, other discourses diverge in some aspects of the others, pointing to the fragmentation of care and the individual. This fragmentation is a central challenge in health practices, in which the conception of health is incorporated only in the absence of disease, which results in the lack of a longitudinal plan of care.

Given the identification of the multiple needs of hospitalized patients with covid-19, the response to the embracement and resolution of these needs is inherent in the use of light

technologies. Care should be fully linked to the use of these technologies, applied to the work process of this profession in the day to day care of patients, as they increase the quality of care and help reduce suffering at this difficult time, which is hospitalization.

In this sense, the results of this study provide a more in-depth knowledge of this problem, related to the covid-19 pandemic, which is nursing care for hospitalized patients due to the severity of the disease, information that enables the creation of care protocols and (re) directs the praxis of these professionals, leading them to critical reflection and the production of comprehensive and quality care, which meets the multiple needs of patients, helping them in their recovery and/or relief from suffering.

The results achieved are expected to contribute to the critical reflection of nursing professionals, in order to broaden the look beyond the biological needs of the individual, seeking to meet their multiple needs for providing quality and excellence service. In order to broaden the debate on the subject, new research beyond nursing professionals should be conducted, from the perspective of professionals at all levels of health care and patients who received the care.

Collaborations:

1 – conception and planning of the project: Caio Bismarck Silva de Oliveira and Luana Carla Santana Ribeiro;

2 – analysis and interpretation of data: Caio Bismarck Silva de Oliveira and Luana Carla Santana Ribeiro;

3 – writing and/or critical review: Caio Bismarck Silva de Oliveira; Luana Carla Santana Ribeiro Lidiane Lima de Andrade and Magaly Suênya de Almeida Pinto Abrantes;

4 – approval of the final version: Caio Bismarck Silva de Oliveira; Luana Carla Santana Ribeiro; Lidiane Lima de Andrade and Magaly Suênya de Almeida Pinto Abrantes.

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There are no conflicts of interests.

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References

- World Health Organization. WHO Coronavirus (COVID-19) Dashboard [Internet]. 2020 [cited 2023 Feb 15]. Available from: <https://covid19.who.int/>
- Brasil. Ministério da Saúde. Coronavírus Brasil [Internet]. 2020 [cited 2023 Feb 15]. Available from: <https://covid.saude.gov.br/>
- The Novel Coronavirus Pneumonia Emergency Response Epidemiology Team. Vital surveillances: the epidemiological characteristics of an outbreak of 2019 novel coronavirus diseases (COVID-19) – China. *China CDC Weekly*. 2020;2(8):113-22. doi: 10.46234/ccdcw2020.032
- Souza NS, Souza TSB, Chagas FRC, Silva NF, Silva SV, Silva CC. Repercussions of care technologies in intensive care units. *Rev. enferm. UFPE on line*. 2018;12(10):2864-72. doi: 10.5205/1981-8963-v12i10a236449p2864-2872-2018
- Merhy EE. Em busca do tempo perdido: a micropolítica do trabalho vivo em saúde. In: Merhy EE, Onocko R. *Agir em Saúde: um desafio para o público*. São Paulo: HUCITEC Editora; 1997, p. 71-112.
- Almeida Q, Fófano GA. Tecnologias leves aplicadas ao cuidado de enfermagem na unidade de terapia intensiva: uma revisão de literatura. *HU rev*. [Internet] 2016 [cited 2020 Oct 07];42(3):191–6. Available from: <https://periodicos.ufjf.br/index.php/hurevista/article/view/2494>
- Ceccon RF, Schneider IJC. Light technologies in the pandemic times: Health education as a device to fight the Coronavirus. *Pre-Print em Anal*. 2020;91(5):287. doi: 10.1590/SciELOPreprints.136
- Souza VRS, Marziale MHP, Silva GTR, Nascimento PL. Translation and validation into Brazilian Portuguese and assessment of the COREQ checklist. *Acta Paul Enferm*. 2021;34:eAPE02631. doi: 10.37689/acta-ape/2021AO02631
- Paraíba. Secretaria de Estado da Saúde. Plano de contingência estadual para infecção humana pelo coronavírus (covid-19). [Internet] Paraíba: Secretaria de Estado da Saúde; 2020 [cited 2021 Aug 10]. Available from: https://paraiba.pb.gov.br/diretas/saude/coronavirus/arquivos/plano-de-contingencia-estadual-para-infeccao-humana-pelo-coronavirus-_pb_-atualizado-12-06-20.pdf
- Minayo MCS. Amostragem e saturação em pesquisa qualitativa: consensos e controvérsias. *Revista Pesquisa Qualitativa* [Internet]. 2017 [cited 2022 Mar 05];5(7):01–12. Available from: <https://editora.sepq.org.br/rpq/article/view/82>
- Minayo MCS. *O Desafio do Conhecimento: pesquisa qualitativa em saúde*. 13. ed. São Paulo: HUCITEC Editora; 2013.
- Orlandi EP. *Análise de discurso: princípios e procedimentos*. Campinas: Pontes; 1999.
- Dingling H, Xia Z, Bin W, Lihua G. Psychological response and nursing countermeasures of patients in COVID19 isolation ward (in Chinese). *Journal of Modern Clinical Medicine*. 2020;4(46):288-9. doi: 10.11851/j.issn.1673-1557.2020.04.018
- Carlucci M, Carpagnano LF, Dalfino L, Grasso S, Migliore G. Stand by me 2.0. visits by family members at COVID-19 time. *Acta Biomed*. 2020;91(2):71–4. doi: 10.23750/abm.v91i2.9569
- Sacco G, Léonart S, Simon R, Noublanche F, Annweiler C. Communication Technology Preferences of Hospitalized and Institutionalized Frail Older Adults During COVID-19 Confinement: Cross-Sectional Survey Study. *JMIR Mhealth Uhealth*. 2020;8(9):e21845. doi: 10.2196/21845
- Cui S, Zhang L, Yan H, Shi Q, Jiang Y, Wang Q, et al. Experiences and psychological adjustments of nurses who voluntarily supported covid-19 patients in Hubei Province, China. *Psychol Res Behav Manag*. 2020;13:1135–45. doi: 10.2147/PRBM.S283876
- Saad M, Medeiros R, Peres MFP. Hospital religious-spiritual assistance: the “whys” and the “hows.” *HU rev*. 2020;44(4):499–505. doi: 10.34019/1982-8047.2018.v44.16964
- Santos EL, Dórea SNA, Maciel MPGS, Santos LKF, Silva MB, Moraes MGL. *Assistência humanizada:*

- percepção do enfermeiro intensivista. *Rev baiana enferm.* 2018;32:e23680. doi: 10.18471/rbe.v32.23680
19. Merhy EE, Feuerwerker LCM. Novo olhar sobre as tecnologias de saúde: uma necessidade contemporânea. In: Merhy EE, Baduy RS, Seixas CT, Almeida DES, Helvo Júnior S. *Avaliação compartilhada do cuidado em saúde: surpreendendo o instituído nas redes.* Rio de Janeiro: Hexis; 2016, p. 59-72.
20. Santos RCA, Miranda FAN. Importância do vínculo entre profissional-usuário na estratégia de saúde da família. *Rev. enferm. UFSM.* 2016;6(3):350. doi: 10.5902/2179769217313
21. Fernandez M, Lotta G, Passos H, Cavalcanti P, Corrêa MG. Condições de trabalho e percepções de profissionais de enfermagem que atuam no enfrentamento à covid-19 no Brasil. *Saúde Soc.* 2021;30(4):e201011. doi: 10.1590/S0104-12902021201011
22. Wang J, Zhou M, Liu F. Reasons for healthcare workers becoming infected with novel coronavirus disease 2019 (COVID-19) in China. *J Hosp Infect.* 2020;105(1):100–1. doi: 10.1016/j.jhin.2020.03.002
23. Góes FGB, Silva ACSS, Santos AST, Pereira-Ávila FMV, Silva IJ, Silva LF, et al. ADVERSIDADES VIVENCIADAS POR PROFISSIONAIS DE ENFERMAGEM EM UNIDADES DE TERAPIA INTENSIVA EM TEMPOS DE COVID-19. *Rev Baiana Enferm.* 2022;36:1–12. doi: 10.18471/rbe.v36.45555
24. Backes MTS, Higashi GDC, Damiani PR, Mendes JS, Sampaio LS, Soares GL. Working conditions of Nursing professionals in coping with the Covid-19 pandemic. *Rev Gaúcha Enferm.* 2021;42(esp):e20200339. doi: 10.1590/1983-1447.2021.20200339
25. Bruyneel A, Gallani M-C, Tack J, D'Hondt A, Canipel S, Franck S, et al. Impact of COVID-19 on nursing time in intensive care units in Belgium. *Intensive Crit Care Nurs.* 2021;62:102967. doi: 10.1016/j.iccn.2020.102967

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