

Beyond the imaginable: experiences lived by ICU health professionals during the Covid-19 pandemic

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Resumo: The study aimed to analyze the experiences lived by professionals related to changes in health work in the Intensive Care Unit, during the critical period of the first wave of the Covid-19 pandemic in Maranhão. This is a descriptive-exploratory study with a qualitative approach, carried out in the Intensive Care Units of public hospitals in Maranhão, from November 2020 to January 2021. Fifteen professionals took part in the study. Data collection was done through semi-structured interviews, with the sample defined by the criterion of saturation of meanings. Content analysis and NVIVO® 12 software were used. It emerged that work overload, shortage of professionals and fear of contagion affected the quality of care and generated new ways of producing care. In that context, providing "high standard" care was a challenge cutting across the social and technical spaces of intensive care. Experiencing deaths on a larger scale affected intersubjective relationships in personal and professional spheres. Changes in the organization of space, care and interprofessional relationships may indicate ways to rethink the effects of this phenomenon on agents, users and services, as well as providing greater skills to deal with future emergency scenarios.

► **Keywords:** Covid-19. Intensive Care Units. Critical care.

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Introduction

The Covid-19 pandemic challenged the hospital component with extraordinary magnitude, especially in the initial period (GRIFFIN *et al.*, 2020; FEST; KREWULAK, 2021; ANDRADE *et al.*, 2020). The scenario of large-scale morbidity and mortality and the flow of critically ill patients requiring intensive care revealed that Intensive Care Units (ICUs) would be one of the most affected services by the health crisis that was taking hold (KEENE *et al.*, 2021; ROSENBAUM, 2020; GRASSELLI; PESENTI; CECCONI, 2020).

It was found that 5% to 16% of people who developed severe presentations of the disease required ICU admission. This situation has caused an increase in the demand for critically ill patients in a short space of time and, in parallel, a strain on health systems in different socioeconomic contexts (GRASSELLI; PESENTI; CECCONI, 2020; WU; MCGOOGAN, 2020).

From December 31, 2019, when China informed the World Health Organization of the first cases (PHELAN; KATZ; GOSTIN, 2020), until October 11, 2022, the world counted 622,340,197 confirmed cases and 6,559,629 deaths from the disease. Brazil was in second place in the ranking of countries with the highest number of deaths and fourth with the highest number of confirmed cases (JOHNS HOPKINS, 2022). The state of Maranhão, similar to the global health emergency scenario, was faced with a staggering increase in the number of cases of the disease that required critical care (CONASS, 2022), and accounted for 473,580 cases and 10,993 deaths up to the aforementioned date.

To estimate the size of the repercussions of this event for health work and frontline professionals, especially for the working environments of Intensive Care Units (ICUs), is not an easy task, especially when shedding light on the cruelest moment experienced by them: the critical period of the first wave (TEIXEIRA *et al.*, 2020; ROSE *et al.*, 2021).

ICU work in itself is complex. The stressful environment, the technological resources, the shift schedule, the severity of the patients, the proximity to death and the work overload are all part of the intensivist's routine (RODRIGUES; FERREIRA, 2011). However, Covid-19 has aggravated this context influencing health care and working relationships in different ways (KEENE *et al.*, 2021). Suddenly, the work process in the ICU had to respond to this new scenario of an

unknown disease, with high transmissibility and lethality, with a clinical course and treatment scarcely known up to that moment (HUANG *et al.*, 2020).

In the ICU, as in other health services, the production of care interacts all the time with different types of technology. This interaction gives meaning to the way care is produced (MERHY *et al.*, 2003). Because it is dynamic, this care has undergone changes based on the productive relations of “live work in act”, carried out in a scenario of pandemic exceptionality. The literature is unclear as to the intersubjective aspects involved in these relationships, indicating the need to highlight them from a perspective that considers the ICU beyond a technical field, as one of social practices (FEST; KREWULAK, 2021; BAMBI *et al.*, 2020).

Analyzing the Brazilian scientific production on the experiences of health professionals who worked on the frontline of health care during the pandemic, it was observed that most studies are concentrated in review research (SILVA *et al.*, 2020; MATTANA *et al.*, 2022). Among the empirical studies, few present qualitative data on the subject in the context of exceptionality (MASSETI; VERGARA, 2022; OLIVEIRA, *et al.*, 2022). Thus, qualitative studies on the subject are especially relevant and needed for understanding this phenomenon, making it a field that needs to be explored.

Furthermore, the ongoing pandemic invites us to look at how ICU work has been organized beyond the formal acts of health care. By considering it as a space of technical-social relations and power, in which the subjectivity of the agent permeates the field of work, but is not limited to it (DESLANDES, 2001), we can understand the existence of care arrangements that have emerged or coexisted with the pandemic. In addition, we also expect to catch a glimpse of other dimensions inherent in the relations of care production, such as communication, relations of cooperation and conflict, the feelings, meanings and senses that have emerged from the context and the interaction of its agents.

From this perspective, this study aimed to analyze the experiences of professionals in relation to the changes that occurred in ICU health work during the critical period of the first wave of the Covid-19 pandemic in Maranhão.

Methods

The present research is a descriptive-exploratory study, with a qualitative approach, carried out as part of the matrix project called “The Covid-19 pandemic

and its effects on management and health care in the SUS". It was carried out in the ICUs of two public hospitals in Maranhão, Brazil, which offered Covid-19 ICU beds, in two different municipalities in terms of population size.

The interviews began in November 2020 and ended in January 2021, and referred to the first moment of the Covid-19 pandemic, which occurred from April to June 2020, in Maranhão, the most critical period in the state, whose occupancy rates in intensive care reached maximum capacity (CONASS, 2022), leading the state to decree lockdown as a highest safety measure, from May 5 to 15, 2020, throughout the Metropolitan Region.

To select the sample, we composed a matrix with sociodemographic and service information, extracted from the list of workers, doctors and nurses, who worked in the care of patients admitted to the Covid-19 ICU, provided by the managers of the Units. Purposive sampling was used to select the professionals, considering the diversity of professional profiles in relation to sociodemographic and work criteria, such as age, length of professional experience in the service, academic background and work shift. A sample was chosen which, as a whole, covered the dimensions, knowledge and experiences related to the changes caused by the Covid-19 pandemic in healthcare work in the Intensive Care Unit, and which was as varied as possible. Thus, within the professional categories, the study selected social subjects with different lengths of training and professional experience who worked day and night shifts, with or without specialization in intensive care, according to gender and different age groups. The interviews were then continued until the heterogeneity of the reports was sufficient to analyze the object of investigation.

The interviewees included doctors and nurses who worked in ICU care during the first wave of the pandemic. Priority was given to these two professional categories because they have extensive knowledge of the ICU care process, thus contributing to an understanding of the changes that have occurred in the work process in this service. The exclusion criterion was professionals who had left the workplace during this period.

In order to complete the sample, the criterion of theoretical data saturation was used, with data collection ending when the interviewees did not add any new information to be analyzed. The final sample size was 15 participants.

The technique used for data collection was the semi-structured interview. Two instruments were devised: a structured questionnaire with data on the identification,

training and work of the professionals; and a semi-structured interview script with guiding questions relating to the work process in the ICU during the initial period of the pandemic. The interviews began with the following question: how has the work routine been with the emergence of Covid-19? They then went on to address the themes contained in the script: changes in the workplace, supply and demand for services, work dynamics and relationships, biosafety protocols, availability and suitability of PPE, arrangements in the production of care, as well as questions relating to the feelings, meanings and senses attributed to experiences in that context. To test the instruments, pilot interviews were carried out with doctors and nurses working in the ICU.

The interviews took place in person (14) at the places and times indicated by the interviewees, and one was mediated digitally using Skype® software, scheduled at the convenience of the participant and carried out by the main author. They were recorded with the consent of the interviewees and later transcribed in full. The average duration was 40 minutes.

Content analysis was carried out using the thematic modality (BARDIN, 2011). The steps used were pre-analysis, with floating reading of the transcripts; categorization of the material, classifying the data in search of thematic units, nuclei of meaning and the general concepts that supported the analysis of the data produced. The results were interpreted using different theoretical contributions from the field of public health, studies and authors on this subject.

The perspectives and experiences of the professionals from the hospitals studied were found to be similar. We therefore decided to categorize them together. In addition, the length of experience in the service was coded into three categories: recent=T1 (up to two years); intermediate=T2 (between two and five years); and senior=T3 (more than five years).

NVIVO® 12 software was used to help manage, organize and process the data. It should be noted that this research followed the steps recommended by the Consolidated Criteria for Reporting Qualitative Research (COREQ).

This research was cleared by the Research Ethics Committee of the University Hospital of the Federal University of Maranhão (CEP HUUFMA - 35645120.9.0000.5086). To ensure the confidentiality of the participants, the names were replaced by initials: “E” for nurse and “M” for doctor, followed by a number according to the order of participation. The interviewees signed an informed consent form.

Results and Discussion

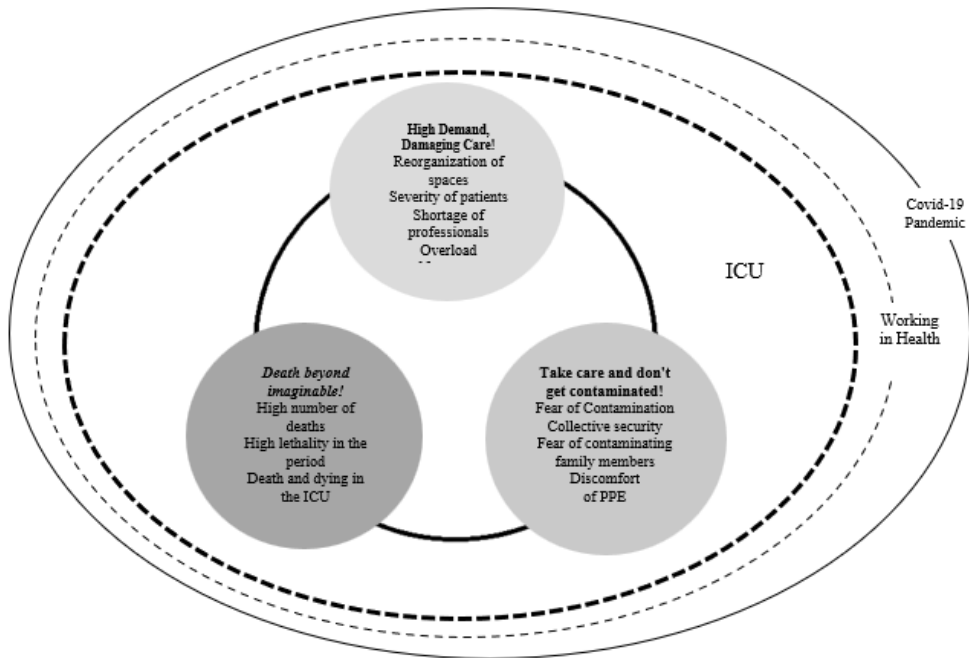
Among the 15 professionals interviewed, eight were nurses and seven were doctors, aged between 25 and 53, more often male (8), single (8) and brown (6). The average time since graduation was 9.5 years and ICU experience ranged from nine months to 30 years. Among the participants, 11 said they were specialists in intensive care and three were unit managers who also carried out care activities.

Three thematic axes emerged from the analysis of the interviewees' narratives about their experiences with the changes in ICU health work: high demand, damaged care; caring and not getting contaminated; and experiencing death beyond what is imaginable.

These axes and their respective sub-themes are represented in Figure 1 by the three inner circles and indicate that, although they are independent categories, they complement each other, articulate and mark the experiences described by the interviewees.

The middle and outer circles delimit the approaches of this study. The greater density of the dashed line (Figure 1) indicates the intensity of the changes caused by the pandemic in ICU healthcare work. Based on the literature (GRIFFIN *et al.*, 2020; FEST; KREWULAK, 2021; VRANAS *et al.*, 2021) and the information gathered through the interviews, it can be inferred that ICUs were one of the sectors that suffered the most from the effects of this phenomenon at the most critical moment, which generated sudden and widespread changes in these services. It was necessary to change and expand spaces, train and manage people and reinvent the provision of care in the face of work overload and a shortage of professionals.

Figure 1. Diagram of the thematic axes and sub-themes obtained from the data analysis.



Captions

- Covid-19 effects
- - - Higher effects intensity
- Links among categories

High demand, damaging care!

Faced with the imbalanced setting caused by the growing demand for ICU admissions and the insufficient supply of beds, the professionals mentioned the urgent need to reorganize the hospital environment, causing the Units to redirect some hospital sectors to the Covid-ICU. In addition to this measure, extra beds were opened to care for referred patients, who were allocated according to the severity of their clinical condition. It should be noted that there were intense changes in the (re)organization and classification of patients as new updates on biosafety protocols, transmission mechanisms and clinical management of the disease emerged.

[...] (demand) was so high that there was a need to open other beds that had all the intensive care support outside of the ICU [...] The yellow ward is for regular ward patients, the red ward is for critically ill patients and has all the support of an ICU. It has an infusion

pump, a ventilator, monitors, everything. So, because demand was high, there was this need to open these beds, which are ICU beds, but outside the ICU. (M1, T1)

The expansion of these beds was accompanied by the challenges inherent in meeting the requirements for providing highly complex care, such as the availability of professionals qualified to deal with complex cases and sufficient medical and hospital supplies for these beds (BRASIL, 2010).

Experiences with transformations in the elements that represent the objectivity of health work in the ICU, understood here as the organization of space, service or work dynamics, refer to issues related to access to health, especially the availability of services and resources. The discussion about this concept is complex and has been conceived as the opportunity to use health services at different levels. However, accessibility can be more complex in health sectors and contexts than in others (SANCHEZ; CICONELLI, 2012).

In the same vein, Noronha *et al* (2020) mapped the supply of hospital beds and assisted ventilation equipment in the different regions of Brazil during the initial period of the Covid-19 pandemic. The authors found significant care gaps in the North, Northeast and Center-West regions. In addition, they identified that the distance traveled to obtain care was unequal across the country, which possibly hindered access to medical and hospital care in some regions of the country.

In this way, the global crisis scenario caused by Covid-19 has brought serious challenges to effective access to intensive care, putting a strain on high-complexity health work. There have been real efforts to respond to the overload of the health infrastructure, resulting from the significant influx of people who have become seriously ill and require intensive care (ROSENBAUM, 2020; GRIFFI *et al.*, 2020).

This effort to structure the work environment has, to some extent, overridden the resilience of these professionals (WANG *et al.*, 2020; GROTBORG, 2006). A Brazilian study showed low levels of resilience and higher average scores for depression among nursing professionals investigated during the pandemic and warned of the need for strategies to promote the mental health of these agents in pandemic scenarios (GIR *et al.*, 2022).

In parallel to these contextual developments, the rapid evolution in the severity of patients with Covid-19 required intense care that overloaded the available professionals and occurred at a time when the course of the disease and the appropriate treatment were not well understood:

The demand on the service was very high, not least because it was a new disease, they were patients with different nuances that we weren't used to. It was a very rapid type of complication, in a matter of hours the patient's condition changed dramatically. So he was a stable patient and suddenly he became a very serious patient, right? It was a very high demand for service, with a very short period of time, and a very small number of professionals. So, we were very, very overloaded at the time. The nurse would leave the room and go to the bathroom to cry, because she couldn't take it any more (M8, T1).

The interviewees said that the work dynamics and care routine in intensive care were drastically maximized due to the increase in the number of critically ill patients and the insufficient number of professionals to meet the demand, generating work overload and physical and emotional exhaustion. In this sense, providing the usual high standard of ICU care has become a challenge in the face of this new reality (BAMBI *et al.*, 2020).

In line with the literature (ROSENBAUM; FACING, 2020; HUH, 2020; BERGMAN *et al.*, 2021), among the challenges reported by the interviewees were the lack of knowledge of the disease and its evolution, the growth of time taken to provide care to each patient, the reduced number of professionals to respond to the exceptionality of the situation and the substantial increase in workload.

The shortage of health professionals was a common report among those interviewed which, when it reached critical levels at the peak of the pandemic, left the feeling that adequate care had not been provided. This perception was reported by the professionals in different ways, whether due to the lack of enough professionals to meet demand, or the lack of experience of the new professionals hired to expand ICU beds:

Something that's interesting, not just for the medical part, but it's what I've seen in practice: Covid kills a lot, yes mortality is high. But we've had critical periods when it comes to care. I didn't have a technician for that number of patients, I didn't have a nurse, I didn't have a professional for that number. (M2, T3).

[...] because at that time a lot of young doctors came in who were totally inexperienced, not just from a technical point of view, but also from an emotional point of view, you know, these kids came in all of a sudden without having been prepared or emotionally prepared. (M4, T3).

There was a need for more professionals to provide ICU care at that time, therefore needing to relocate and hire professionals, some with little or no training, as well as inexperience in intensive care, similar experiences having been observed in Italy. Thus, from the perspective of the professionals interviewed, the high demand

for patients, coupled with the lack of professionals to respond to this new scenario, compromised care at the time (BERGMAN *et al.*, 2021).

As suggested by Bambi *et al.* (2020) and Bergman *et al.* (2021), these measures, despite being necessary in the face of bed expansion, seemed to unbalance the “combination of skills among the team” and the quality of care.

Faced with the new demands imposed by the disease, the work teams had to join forces and decide which procedures would be carried out during the work shift, more specifically, the priorities in that context:

There were certain days when there were no more differences between nursing technicians, nurses and doctors, and everyone was doing the same things. Doctors doing aspiration, bathing patients in the bed, dentists administering medication, doctors administering medication, you know? There was a big overload [...] there were days when, for example, we had one technician for 6 or 8 patients. So, demand was very high, so what could we do: -ah, but he'll have to bathe. -No! Let's do what's a priority. The priority is medication, priority this, priority that, so that was a very critical moment. (M2, T3).

[...] We could see the exhaustion on everyone's faces, but we could see the will to work and the will to help. (E13, T3).

The reports portrayed the commitment of professionals to optimize care, considered a priority for inpatients, an experience called “rationing of care” in US hospitals (VRANAS *et al.*, 2021). Even to the point of suspending the division of labor that characterizes the different professional categories in the hospital environment. The quality of work was not at the same level as that offered in normal times. It was a critical moment. That's why, despite their exhaustion, the workers were still willing to work and help by providing care.

The feeling of professional collaboration, resilience and teamwork were fundamental, using their own means and skills to face this moment (GROTBERG, 2006).

Deslandes (2002), when discussing the health work process, pondered that the way in which space is organized and care is produced reveals the technical-social and power relations between subjects, in which the fragmentation of responsibilities characterizes a hierarchical model of overvaluing professional categories, sidelining others. On the other hand, it can be inferred from the interviewees' statements that the harmful effects of the pandemic resulted in a temporary rupture in this work configuration, based on the medical-hegemonic model, in such a way that

domination and subordination in the social and technical spaces that make up the ICU also became secondary during this period.

In this sense, the interviewees expressed that providing humanized, timely and quality care in this context was an almost insurmountable challenge, given the insufficient workforce and the high demand for critically ill patients (VRANAS *et al.*, 2021). This insufficiency was due to colleagues gradually falling ill, the shortage of professionals to hire immediately and the direct refusal of professionals to carry out activities in the Covid-ICU.

A study showed that nursing care and the quality of care in general were seriously affected during this period. The term “deprioritized” was used in the literature to refer to nursing care that was compromised by the workload and the reduced number of professionals (BERGMAN *et al.*, 2021).

When considering the Brazilian context, Rotenberg *et al.* (2022) add: “the feeling of not meeting all the patient’s needs leads workers to suffer and possibly fall ill, which means that poor care is a factor in suffering”. This finding arises from the difficult responsibility perceived by frontline health professionals to ensure the humanization of care in the face of the harmful effects of the pandemic on the production of health care.

Thus, faced with the exceptionality experienced in the hospital environment, new forms of work organization have emerged to systemize care. For the interviewees, this new arrangement in the production of care was necessary to ensure care at that time, while reducing the discomfort of long hours wearing PPEs and the risk of contagion by the virus, by minimizing exposure time in patient care.

I had to come up with strategies: we divided the team into two, taking turns with the hours and services. When the shift started in the morning, everyone would come in, receive the shift, bathe the patient in bed, dress them, change the fixation, the tube, whatever had to be done with the patient. Then we’d split up. The first team would stay outside for 2 to 4 hours and the other inside the ICU. Then, those outside would organize the medications, materials, do the evolution, schedule the medications and then get dressed and go in. (E7, T2).

The meaning attributed to the way of producing care in that context was related to the collective work itself, built from the collaborative perspective of these professionals, with the aim of “taking care of the user, the effective bearer of health needs”. In this respect, the creative power of the worker conceived new possibilities for changes in the work process, weaving new actions into the act of caring (MENRY, 2003; VRANAS, 2021).

Caring and not getting infected!

It was evident that the critical period of the first wave of the pandemic impacted on the memory in a way that emerged in the professionals' narratives, because even when they addressed the different moments of the pandemic, the participants referred to the critical phase, establishing an emotional connection with the facts experienced at that time, such as the fear of contagion with the virus. This phenomenon was mentioned repeatedly by the interviewees, marking their experiences.

The fear of becoming infected and infecting colleagues was permanent and permeated the entire work routine, especially when the orotracheal intubation procedure was necessary. Uncertainties about transmission mechanisms and the disease itself were challenges faced at the time:

The protocol that changed every day: -No, today we're going to do it this way; tomorrow we're going to do it another way. The issue of intubation, you know, which was different, all different care. During the pandemic alone, I lost count of how many protocols for intubation came out (E2, T2).

The greatest pressure was at the time of intubation. We had to act calmly, try to stay calm, especially during the procedure, because any desperation among us was a risk of contaminating a colleague or contaminating ourselves. (E3, T2).

The high risk of viral transmission during intubation required a small, orchestrated team made up of skilled professionals (PHUA *et al.*, 2020). A study found that around 77% of healthcare workers perceived a high risk of Covid-19 infection in healthcare spaces, due to frequent exposure and fatigue at work (HAKIM *et al.*, 2021).

Interviewees reported that fear of infection increased as the numbers of infected people and deaths among healthcare workers were counted (COFEN, 2022; CFM, 2022). On the other hand, although fear was a constant, these professionals showed admirable professional dedication (LIU *et al.*, 2020). However, it cannot be ignored that this fear may have been potentiated by the media bombardment of sometimes subverted information about the disease, negatively influencing professionals' understanding of risk (OLIVEIRA; LUCAS; IQUIAPAZA, 2021).

It was noted that the meaning attributed to team safety marked the interpersonal relationship of the work team. It was emphasized that, at that moment, what was important was everyone's safety, a condition that would guarantee the continuity of patient care:

We are vigilant so that there is no risk of the professional becoming contaminated, so that one supports the other during dressing and when removing PPE. We always kept an eye on each other to make sure there was no risk of contamination. (E3, T2).

Evidence of the high risk of contamination during removing PPEs (OLIVEIRA; LUCAS; IQUIAPAZA, 2021) raised the perception of insecurity, producing a sense of responsibility towards others. The fear of getting sick was a notable narrative during the interviews, despite the constant training on service flows and biosafety protocols received before and during the pandemic. Thus, caring and not getting infected was a persistent challenge in this new scenario. As Huh (2020) suggests, staff safety was a prerequisite for guaranteeing care for hospitalized patients, and was therefore fundamental in that context.

In addition to this fear, these professionals were faced with problems arising from the conditionality of new routines, such as the use of personal protective equipment (PPE):

[...]And it turns out that one time or another there could be a failure, right? In this tiring process of spending all day with it. And sometimes there were patients who would decompensate from one hour to the next, and when you woke up, you'd be on top of the patient and you'd go: -My God, what's up? Where's my stuff? Because you were thinking about giving care, the priority in your head was always to take care of them." (M3, T3).

I'd come home with a bruised nose, a bruised forehead from the PPE that we had to hold for as many hours as we could. (E11, T3).

The need for prolonged use of PPE was a recurring challenge. As also observed by Liu *et al.* (2020), in addition to physical tiredness, some interviewees reported respiratory discomfort, headaches and skin changes resulting from the pressure of these devices. Even meeting physiological needs, such as eating and elimination, was perceived as a stressor in the work routine, due to the fear of contamination when changing devices for entering and leaving the ICU. In addition, Liu *et al.* (2020) and Bergman *et al.* (2021) considered that communication with patients was affected by the constraints of using PPE and the workload.

M3's account suggests that in this context of demands for the use of various PPE, the occurrence of an unscheduled situation could represent a threat to professional safety, which, in the unpredictability of the call, meant that self-care related to biosafety was renounced, demonstrating that the priority at that moment was immediate patient care.

A study showed that health professionals' exposure to the risk of contagion was related to factors such as incorrect use of PPE and exhaustion due to excessive working hours, putting their occupational safety at risk (OLIVEIRA; LUCAS; IQUIAPAZA, 2021).

It was worth noting the fear of infection caused by the disease, which was intensely felt when the professionals referred to family members. The fear of infecting them and thus running the risk of reproducing the scenes experienced in the ICU, led many of these professionals to leave their own homes, moving in with other professionals or staying on the hospital premises:

I wasn't afraid of contaminating myself, I was afraid of contaminating my parents, of bringing... you know? My colleagues rented a little room here near the hospital so I couldn't even go home, it was crazy... it was something I never thought I'd experience in my life, like that... never... (E12, T3)

I was away from my family, I spent 58 days here in hospital." (M2, T3)

In this way, it can be understood that these professionals experienced duplicated fear, not only for themselves, but also for their families (BAMBI *et al.*, 2020), in a strictly individual and exclusive way (VIESENTEINER, 2013). Studies have shown serious effects on the mental health and lives of these professionals, resulting from recurring fear and the disruption of intersubjective relationships in the social world (HIDIEBERE; TIBALDI; LA TORRE, 2020; WANG *et al.*, 2020).

The lives of these professionals have undergone profound changes. In the private sphere, some of them experienced a routine of isolation, as an alternative to protecting their families, which was cushioned by messages and video calls. In the professional sphere, their days off were marked by exchanges of experiences and scientific evidence with professionals from other hospitals. In this way, they were always immersed in the "world of intensive care". It was recognized that health professionals took on the responsibility of caring for others in a context they had never experienced before, being exposed to physical and emotional exhaustion (PHUA *et al.*, 2020; LIU *et al.*, 2020).

Experiencing death beyond what is imaginable!

This category discussed the subjective dimensions of the experience of death and dying in the ICU. From the professionals' point of view, the high number of deaths in the ICU was a dramatic effect of the pandemic in the first wave:

[...] one of the things that left me most traumatized was seeing eight bodies lined up, something you're used to dealing with in the ICU, dealing with death, but seeing eight lined up, at that moment, I blacked out and I don't remember anything else from that shift, just that moment. To this day, it's a scene that never leaves my mind, you know? I didn't have a problem with it, but it was something that marked me (E5, T3).

Covid-19 has brought a serious morbidity and mortality scenario that has challenged health systems (GRIFFIN *et al.*, 2020; ANDRADE *et al.*, 2020). The thousands of infected people and the number of deaths that increased every day were exposed in the media and shocked the world (WESTPHAL, 2020).

The mortality rate in the ICU was initially high, and the rapid progression of critically ill patients to Acute Respiratory Distress Syndrome (ARDS) caused concern among professionals (HUANG *et al.*, 2020).

The estimated lethality of Covid-19 at the start of the first wave of the pandemic varied from country to country (RAJGOR *et al.*, 2020). In Brazil, from February 23 to April 24, 2020, the lethality rate was 6.9%. States in the North and Northeast regions had higher rates compared to other states. Maranhão was among the 10 states with the highest lethality rates in the period from April 5 to 11, 2020, with 6.10% (SOUZA *et al.*, 2020).

Although death is an event ever present in the lives of intensive care professionals, Covid-19 has put them face to face with it in a way that had never been conceived before. Experiencing successive deaths was seen as unimaginable, as well as challenging from a professional and personal point of view:

From the moment they were admitted there (to the ICU), the family couldn't see them anymore, and when the patient died, we would prepare the body inside the ICU itself, put it in two bags, and send it to the morgue, and there the funeral home would come, and just put it in the closed coffin and the family would never look at it again. So, it was a bit of a psychologically difficult time for everyone. We were tired physically and mentally, and we were also faced with these situations. Situations I'd never been through, I'd never even imagined one day going through, that was the worst moment I've experienced in my profession." (E7, T2).

The pandemic imposed drastic limitations on farewell rituals, breaking with funeral liturgies centered on the presence and symbolism invoked by the body. With the obligation of sealed coffins, bodies could not be dressed, touched or contemplated for the last time. The unfulfilled farewell translates the idea of "incompleteness", "unfinished business" or even "unfulfilled mission" (DANTAS *et al.*, 2020).

The separation from the patients' families also caused suffering for these professionals. The team's and these patients' communication with their families was limited to virtual visits and medical bulletins, which were made when the patients were awake or concerned intubated patients. Seeing them dying "alone", without the company or farewell of family and friends, were experiences reported as distressing for these professionals.

Israel's experience with hospitalization without visits showed that family members expressed frustration and a sense of loss of control, due to the impossibility of accompanying their loved ones. Added to this, there was a lack of knowledge and fear of the disease, which increased concern about the family member's clinical condition. For professionals, mediating virtual visits and building the bond without face-to-face proximity and empathy were challenging experiences, which broke with the management of this moment, which was once built in person (LEVIN-DAGAN; STRENFELD-HEVER, 2020).

Thus, exposure to deaths and mourning in series and in a short space of time are also understood as stressors experienced by frontline professionals in the fight against the pandemic, influencing the perspective and way of facing death in this context (REIS *et al.*, 2021).

Based on the understanding that ICU care involves aspects beyond specialized technical tasks, some professionals felt challenged by the desire to offer emotional support to the patient, but having to fulfill the "technical obligations" of care in a context of stress and work overload. Despite this dilemma, these professionals took on a variety of roles in moments of anguish, in the struggle to maintain life or in the moments of the last goodbye.

It is noteworthy that frontline professionals are subject to developing moral distress as a result of the negative impacts of the pandemic on health work. By experiencing painful feelings, triggered by not providing "good patient care" or feeling "dehumanized", due to the restrictions of that moment, they reveal how this phenomenon has redesigned the intensive care environment, as well as transformed the intersubjective relationships of care (CACCHIONE, 2020; SILVERMAN; KHEIRBEK; MOSCOU-JACKSON, 2021).

Leaving the shift and disconnecting from the "world of intensive care" was perceived as a difficult task. Some professionals reported sadness and fatigue during their time off. Others said they remembered each patient, their face and the request

not to let them die, leading them to reflect on the ephemeral nature of life as at no other time.

These ICU experiences refer to what Viesenteiner (2013), in Nietzsche, seeks to problematize by quoting “felt on the skin”, so that each of these experiences “constructs each person’s own clothing, absolutely unique and individual”.

Based on these discussions, it can be inferred that the large number of deaths during the period of the first wave in an intensive care environment caused psychological stress, both in quantitative terms, due to the repeated experiences of experiencing death and dying in high numbers; and in qualitative terms, due to the constant emotional strain resulting from the unusual situation of giving patients hope, even when it was running out.

On this last point, Aredes and Modesto (2016) point out that in the face of difficult circumstances, such as the occurrence of death or situations where it is impossible to cure, the use of a “shield or mask” to manage affection and thus protect oneself from the suffering of others “does not cancel out their sensitivity to the problems of others, in the face of various difficult facts inherent in the profession, but, in a way, forces their ‘self’ to resist events”.

On the other hand, the interviewees’ narratives evoked a second perspective. In that context of exception, of intense changes at work caused by a new illness, the relationships between professionals and patients became shorter and, at the same time, more affectively close. Experiences were reported, such as the requests and confidences made by patients, as well as the messages sent to family members during “virtual visits” or when updating the medical bulletin, which produced value and personal learning.

Thus, it was clear that these agents were affected by experiencing the death and mourning of others on a recurring basis. When providing care to patients, they were “themselves, with their body, hands, voice and ears, the means of interaction between the patient and the outside world” (REIS *et al.*, 2021, p. 110284).

The psychological impact on frontline workers had been reported in the SARS outbreak in 2003, drawing attention to the high level of stress and psychological distress, perceived by 68% and 57% of workers, respectively (TAM *et al.*, 2004). In addition, Lee *et al.* (2020) examined the impact of MERS on mental health in professionals, showing a high risk of post-traumatic stress disorder symptoms during and after the outbreak (LEE *et al.*, 2018).

Based on these discussions and considering that every experience is an experience linked to the lived, so that you don't experience something by legacy or by hearing about it (VIESENTEINER, 2013), this study sheds light on the intersubjective relationships that occurred in the ICU environment, which cross hospital restructuring and the care process (in the broad sense), revealing the transformations experienced by professionals in the critical period of the first wave of the Covid-19 pandemic. These transformations permeate the objective elements of the health work process, but it is in the social world, the encounter or mismatch with the other, that these agents are challenged to resist and reinvent themselves, by confronting the tensions, fear and existential conflicts brought on by the disease.

Final considerations

The Covid-19 pandemic has caused major transformations in the organization of health work in the ICU, impacting on the production of care, professionals and intersubjective relationships. The professionals were faced with an unusual scenario, which caused bewilderment. Feelings of altruism and cooperation were perceptible in the interviewees' narratives and paradoxically overlapped with the fatigue resulting from the high demand for work, the shortage of professionals and the fear of contamination.

In particular, the shortage of qualified or experienced professionals to deal with serious cases of the disease was particularly noticeable. The professionals who were available had to work hard to ensure care in these circumstances, under the frantic pace of unpredictable work schedules in the face of illness and leave of absence of colleagues. In this respect, the Covid-19 pandemic has highlighted the acute shortage of workers in the Unified Health System, demonstrating the importance of a cohesive and structured public health system to deal with and control health crisis scenarios.

Intensive care was built under the rhythm of uncertainty and ignorance of the disease, being calibrated in the daily tension of working in intensive care. Providing the expected high standard of care was a challenge that spanned the social and technical spaces of intensive care.

The emotional connection with lived experiences and the ambivalent meaning attributed to life and death, care and infection, fear and courage, access and

unavailability of resources, influenced the dynamics and way of thinking and providing care in a health crisis scenario. The professionals were affected by pain and loss in a way they considered unimaginable. This suffering remains latent and still impacts them today on a subjective and collective level.

The changes that took place in the organization of space, in care and in interprofessional relationships may indicate ways to rethink the effects of this phenomenon on agents, users and services in the Brazilian health system, as well as providing greater skills to deal with future emergency scenarios.

The pandemic has had a global dimension, whose effects, more or less adverse, are linked to the actions of states and their respective health systems. In this qualitative study, we discussed changes in care and their effects on interprofessional relationships at local level. It is hoped that other studies can contribute to a comparative perspective. As a limitation, it should be noted that the challenges and perspectives identified may differ from other realities, which prevents the generalization of the results found.¹

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Note

¹ J. F. S. Pereira: project conception; data collection, analysis and interpretation; writing and critical revision of the article. P. S. Oliveira: data collection, analysis and interpretation; writing and critical revision of the article. F. Lamy Filho, R. H. S. B. F. de Carvalho and B. B. dos Santos: data interpretation; writing and critical revision of the article. M. T. S. S. Brito e Alves: conception of the project; analysis and interpretation of the data; writing and critical revision of the article.

Resumo

Para além do imaginável: experiências vividas por profissionais de saúde em UTI durante a pandemia da Covid-19

Objetivou-se analisar experiências de profissionais relacionadas às mudanças no trabalho em saúde em Unidade de Terapia Intensiva, durante o período crítico da primeira onda da pandemia da Covid-19 no Maranhão. Estudo descritivo-exploratório, de abordagem qualitativa, desenvolvido nas Unidades de Terapia Intensiva de hospitais públicos no Maranhão, de novembro de 2020 a janeiro de 2021. Participaram do estudo 15 profissionais. A técnica utilizada para coleta de dados foi a entrevista semiestruturada, com amostra definida pelo critério de saturação dos sentidos. Utilizaram-se da análise de conteúdo e do software NVIVO® 12. Evidenciou-se que sobrecarga de trabalho, escassez de profissionais e o medo do contágio afetaram a qualidade da assistência e geraram novas formas de produção do cuidado. Naquele contexto, ofertar a assistência de “alto padrão” foi um desafio que perpassou os espaços social e técnico da terapia intensiva. Vivenciar as mortes em maior escala afetou as relações intersubjetivas nas esferas pessoal e profissional. As mudanças na organização do espaço, a assistência e as relações interprofissionais podem indicar caminhos para se repensar os efeitos desse fenômeno para agentes, usuários e serviços, além de fornecer maiores habilidades para lidar com cenários emergenciais futuros.

► **Palavras-chave:** Covid-19. Unidades de Terapia Intensiva. Cuidados críticos.

