

INTENSIVE CARE IN HOSPITAL EMERGENCY SERVICES: CHALLENGES FOR NURSES

CUIDADOS INTENSIVOS EM UM SERVIÇO HOSPITALAR DE EMERGÊNCIA: DESAFIOS PARA OS ENFERMEIROS*

CUIDADOS INTENSIVOS EN SERVICIOS DE URGENCIA HOSPITALARIA: RETOS PARA LOS ENFERMEROS

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ABSTRACT

Objective: To identify the challenges, especially the difficulties, concerning the care provided to critical patients in the emergency room of the University Hospital of Londrina, from the nurses' standpoint, as well as list the problem solution strategies suggested by the nurses. **Methodology:** This work was a cross-sectional, exploratory study, together with a descriptive analysis of the data. After having received approval from the Research Ethics Committee of the University Hospital of Londrina, logged under protocol number 239/09, an open question questionnaire, based on structural self-reported references, was applied to all of the hospital emergency room nurses, concerning the nursing care provided to critical patients. **Results:** The main reported difficulties concerned the scarcity of material, human, and physical resources due to the overwhelming demand of critical patients. Other difficulties included the maintenance of the patient's privacy and the handling of specific equipment, such as mechanical ventilators. The main interference in this sector's daily routine with patients in critical conditions was related to staff dimensioning. The main suggested strategies included: increase the number of ICU hospital beds, hire more employees, conduct more trainings with staff, and group critical patients together. **Conclusion:** In light of these results, this study confirmed the hypothesis of the extreme difficulty in providing nursing care to critical patients in the hospital emergency room. Therefore, the suggestions made by this hospital's nurses must be considered, especially those dealing with the governability of professionals.

Keywords: Intensive Care; Nursing Care; Working Conditions; Hospital Care.

RESUMO

Objetivo: identificar os desafios, principalmente as dificuldades, do cuidado prestado aos pacientes graves no serviço de emergência de um hospital de ensino público sob o ponto de vista dos enfermeiros e, ainda, listar estratégias de solução do problema sugeridas pelos mesmos. **Metodologia:** estudo exploratório, de natureza transversal e análise descritiva dos dados. Aplicou-se um questionário baseado na referencial do autorrelato estrutural com questões abertas para todos os enfermeiros do serviço hospitalar de emergência, referente à assistência de enfermagem ao paciente crítico, após aprovação pelo Comitê de Ética em Pesquisa do Hospital Universitário de Londrina, sob o parecer nº 239/09. **Resultados:** as principais dificuldades relatadas foram em relação ao déficit de recursos materiais, humanos e físicos frente à grande demanda de pacientes graves, havendo dificuldade na manutenção da privacidade do paciente e na manipulação de equipamentos como ventilador mecânico. A principal interferência na rotina do setor com a presença do paciente crítico foi em relação ao dimensionamento de pessoal. As principais estratégias sugeridas foram: aumentar os leitos de UTI, contratar mais funcionários, realizar mais treinamentos com a equipe e agrupar os pacientes graves. **Conclusão:** diante dos resultados, confirma-se a hipótese de que há grande dificuldade na assistência de enfermagem aos pacientes graves que permanecem no serviço hospitalar de emergência, portanto, devem-se considerar as sugestões feitas pelos enfermeiros, principalmente, em relação àquelas em que há governabilidade do profissional.

Palavras-chave: Cuidados Intensivos; Cuidados de Enfermagem; Condições de Trabalho; Assistência Hospitalar.

RESUMEN

Objetivo: Identificar los retos, principalmente las dificultades, en la atención de pacientes graves en los servicios de urgencia de un hospital universitario de Londrina desde el punto de vista de los enfermeros y, asimismo, señalar las estrategias de solución sugeridas por ellos. **Metodología:** estudio exploratorio, de naturaleza transversal y análisis descriptivo de datos. Se aplicó un cuestionario basado en el marco estructural de auto-informe con cuestiones abiertas para todos los enfermeros de los servicios de urgencia del hospital, referente a la atención de enfermería al paciente crítico, tras aprobación por el Comité de

Ética en Investigación del Hospital Universitario de Londrina, bajo el parecer n. 239/09. Resultados: las principales dificultades relatadas fueron en relación al déficit de recursos materiales, humanos y físicos frente a la gran demanda de pacientes graves. También es difícil mantener la privacidad del paciente y hay problemas en el mantenimiento de equipos tales como el ventilador mecánico. La principal interferencia en la rutina del sector con la presencia del paciente crítico relatada fue en relación al dimensionamiento de personal. Las principales estrategias sugeridas fueron: aumentar los lechos de UTI, contratar más funcionarios, realizar más entrenamientos con el equipo y agrupar a los pacientes graves. Conclusión: ante los resultados, se confirma la hipótesis de que hay una gran dificultad en la asistencia de enfermería a los pacientes graves que permanecen en el servicio de urgencia del hospital, por tanto deben considerarse las sugerencias de los enfermeros, principalmente, aquellas donde hay gobernabilidad profesional.

Palabras clave: Cuidados Intensivos; Atención de Enfermería; Condiciones de Trabajo; Atención Hospitalaria.

INTRODUCTION

With the implementation of the Brazilian Unified Health System (SUS), what initially arises is the proposal for the hierarchical structure of health assistance services according to the healthcare pyramid, given that its broad base is made up of primary healthcare with the mission of providing integral healthcare services, thus building the “point of entry” for higher level complexity.¹

However, the hospital can be thought of as the point of entry to the healthcare system, through urgency and emergency services, and as the location in which to provide healthcare services that are specific and non-transferable. In this sense, the healthcare system would portray a better image of a circuit with multiple points of entry, in which there would be one more appropriate place for each patient, where the proper type of healthcare service can be provided.²

Due to the need to construct a network of regionalized and hierarchical healthcare services geared toward integral care for urgency treatment, at any level of complexity or severity, decentralizing the healthcare provided exclusively by Hospital Emergency Rooms, the Brazilian National Policy of Urgency and Emergency Care was created.³

To regulate the medical services provided to patients in the Hospital Emergency Room (ER) of a university hospital, in July 2007, a new model of patient care, entitled the User Embrace-ment System with Evaluation and Classification of Risk, set forth by the Brazilian Health Ministry, whose aim is to attend to the patient by the degree of complexity and no longer on a first come first served basis. This system provides the possibility of referring the patients to a less complex healthcare service, when necessary, thus contributing to the correct allocation of resources in healthcare services. In this manner, there is a selection of patients who require more complex healthcare assistance.⁴

However, although there are policies and guidelines that direct the providing of healthcare services to the final user in ERs, these units are commonly overloaded, which can be attributed to the rise in the number of accidents and violence as well as to the insufficient structure of the healthcare services network, at all levels.² In this sense, there has also been an increase in critical patients in the ERs, who ought to be hospital-

ized in Intensive Care Units (ICUs), but there are no available rooms, which unveils the sad reality of the country.⁵

In Brazil, there is still a lack of ICUs, and their distribution in health regions is deplorable. In Brazil today, there are approximately 17,940 ICU hospital beds available in SUS, of which 11,615 are for adults, 2,270 for children, and 4,055 for newborns. In 2011 and 2012, nearly 2,232 new hospital beds were made available.⁵

According to the aforementioned data, it can be concluded that intensive care is not always provided in ICUs. Patients in normal hospital rooms can suffer complications at any moment, thus becoming critical patients. Hospital admissions of critical patients are also commonplace in ERs, brought by the Integrated Service for Emergency Trauma Care (SIATE) as well as by ambulances of the Brazilian service entitled SAMU (Mobile Urgency Healthcare Service). These patients commonly remain in their respective hospital units for an indefinite period of time, as there are no available spaces in ICUs.

The need to objectively evaluate who are the critical patients that require intensive treatment has rendered the use of instruments to measure the severity of a patient’s condition in a practical manner crucial in ICUs.⁶ Among these is the *Therapeutic Intervention Scoring System* (TISS), based on the quantification of therapeutic interventions, geared toward assessing the patient’s healthcare needs and the workload of nurses in the ICU, expressing the percentage of time spent by nurses in direct care provided to the critical patient over a 24-hour period. Also available today is the *Nursing Activities Score* (NAS), which has become more representative within the activities carried out by nurses within ICUs.⁷

Also present within this proposal for the measuring of nurses’ workloads is the Patient Classification System (PCS), which aims to determine the degree of dependency of a patient as regards the nursing team, contributing to defining the workload, in turn guiding the allocation of human resources and cost planning.⁸

The Brazilian Federal Nursing Council (COFEN) regulates the hours spent on nursing care provided to patients with different degrees of complexity and established the parameters for staff dimensioning within healthcare institutions. According to COFEN Resolution 293/2004, what should be considered

as nursing hours, per patient, within a 24-hour period, is 17.9 hours per patient requiring intensive care, that is, for intensive care, 52% to 56% of the professionals must be nurses.⁹

In a study conducted at a university hospital in Rio de Janeiro, the authors evaluated and compared the characteristics and prognoses of hospitalized patients with those who were refused care in ICUs, illustrating a greater death rate among the patients who were not admitted to ICUs as compared those cared for in ICUs. However, this study's approach did not deal only with the lack of spaces in ICUs, but also with the various criteria or factors observed in patients who had not been admitted to ICUs, such as age and specific acute or chronic diseases, which led to a possible conclusion that these criteria are also related to the prognosis of the patient.¹⁰

The maintenance of critical patients in hospital units, especially ERs, has become a constant issue, mainly due to the rise in the number of critical patients as compared to the number of ICU hospital beds, which has not followed this same trend.

Hospitalization and hospital care were not designed in their physical, material, and human resources to attend to this level of demand, thus leading to a possible difficulty in nursing care, in turn sparking interest in investigating the challenges of the nursing team to provide proper intensive care.

For this reason, ERs were chosen as the main field of study in this work, as they are the units that attend to the largest number of critical patients outside of ICUs within the healthcare institution analyzed in this study. It is well-known that all necessary resources can be found in ICUs, which is different than that found in other hospital and care units. In addition, no prior literature presents data regarding the intensive care provided in units other than ICUs and the subsequent impacts on nursing care.

Therefore, the aim of this study was to identify the challenges, especially the difficulties, of providing proper care to critical patients in the ER of the University Hospital of Londrina, from the nurses' standpoint, as well as to list the problem solution strategies that arise from this studied population.

METHOD

This work was a cross-sectional, exploratory study, together with a descriptive analysis of the data. A survey was used as the referential theoretical methodology in an attempt to find the relationships among the variables of a given population, as well as understand its distribution and the prevalence of information, intentions, opinions, and attitudes of the people involved in a given situation.¹¹ One key feature of this method is the use of direct questions to understand one's behavior, also called the *self-report*.^{11,12}

The object of this study was the nursing population of the Emergency Room (ER) services within this university hospital.

Thus, the inclusion criteria included: having a higher education degree in Nursing, working as a nurse in the ER during the period of data collection, be at least 18 years of age, and have more than six months of experience in the ER so as to have a valid knowledge of the unit's circulation and conducts. This sample consisted of a total of 13 individuals distributed in work periods or shifts, with four working in the morning, three in the afternoon, and three at night, denominated here as night A and night B. All of the nurses met the inclusion criteria, except for one professional who was excluded from the study because she was also a researcher of this study. Two individuals refused to participate, characterized by the option not to participate in the study due to a lack of time to properly answer the questionnaire. Therefore, ten questionnaires were answered and returned.

The data were collected by applying a questionnaire containing variables related to sociodemographic data and five open questions about the nursing care provided to critical patients within the ER of the University Hospital of Londrina. The data collection was performed according to the availability of the researcher and the participants, conducted during the months of October and November 2010.

The data collection began after having been analyzed and approved by the Human Research Ethics Committee of the University Hospital of Londrina, logged under protocol number 239/09. Free informed consent forms were signed and returned by all survey participants. The questionnaire was distributed to the professionals in their respective work environments and during their work shifts.

LOCATION OF THE STUDY

The location of the study was the ER of a public university hospital of the state of Paraná, Brazil, of tertiary care, as it is considered a regional reference hospital in Brazilian SUS. This hospital currently has 272 hospital beds.

The university hospital's ER has 46 hospital beds, distributed in pediatric, obstetric, orthopedic, surgical, and medical emergency rooms, and 26 general hospital rooms in the sector. As regards the nursing team, this sector today counts on a staff of 13 registered nurses, 3 nurse's attendants, 39 nurse's aides, and 42 nursing technicians.

To analyze the data according to the methodological and theoretical references, along with the data collection adopted by this study, quantitative and qualitative variables were identified through the structured self-report technique by means of a questionnaire.^{11,12} The organized sociographic data were used as quantitative variables, applying the simple descriptive statistics, using the measures of central tendencies calculated by the *Microsoft Office Excel* 2003 program. The categorization of quanti-

tative variables was performed to better present the individual answers. The qualitative variables related to the open questions were organized, reduced, and grouped according to the similarities among them and their appearance by means of specific topics, making their presentation in rates and proportions possible.

RESULTS

According to the distribution by gender, 90% (9) of the participants were female and 10% (1) were male. As regards the age range, this variable was categorized quantitatively: 10% (1) of the participants were between 20 and 29 years of age, 70% (seven) were between 30 and 39 years of age, and 10% (one) was between 50 and 59 years of age; one nurse did not inform her age. As regards the nurses' experience in the profession: 10% (1) had five years of experience, 60% (six) between 6 and 10 years, 20% (two) between 11 and 15 years, and 10% (one) between 16 and 20 years.

SURVEY QUESTIONS

The results presented in the following tables exceed 100%, as the survey participants gave more than one answer to the questions.

The first question concerned the main difficulties confronted in nursing care provided to patients in the ER who need intensive care. Table 1 demonstrates the difficulties reported by nurses as regards intensive care in the ER of the university hospital.

Table 1 - Difficulties reported by nurses regarding intensive care provided in the ER of the University Hospital of Londrina, PR, Brazil, 2010

Difficulties	N	%
Lack of material resources	6	60
Lack of nursing staff	5	50
Lack of physical resources	5	50
Lack of specialized human resources (medical and nursing staff)	5	50
Lack of staff training	2	20
Excessive inflow of critical patients	1	10
Little patient privacy	1	10
Difficulty concerning who to report to (medical staff)	1	10
Interference in the sector's daily routine	1	10
Overloaded ER	1	10
Workload of nursing care services provided to the patient	1	10

As demonstrated in Table 1, the lack of material resources was the main reported difficulty; however, the human resources, both in the quantitative and the qualitative aspects, were also expressly mentioned.

Table 2 highlights the procedures reported by the nurses as the most difficult to be performed on critical patients in the ER.

Table 2 - Frequency of nursing procedures reported by nurses as the most difficult to be performed on critical patients in the ER of the University Hospital of Londrina, PR, Brazil, 2010

Care	N	%
Care related to the mechanical ventilator	3	30
Maintain patient privacy	3	30
Care with arteriotomy	3	30
Body Hygiene	2	20
Care with central venous access	2	20
Lack of ICU nurse prescriptions	2	20
Checking of intravesical pressure	2	20
None	1	10
Prevention of pressure ulcers	1	10
Checking of central venous pressure	1	10
Drugs in infusion pumps	1	10
Suction of tracheal secretion	1	10
Aid in medical procedures*	1	10
Probes	1	10
Cardiopulmonary resuscitation (CPR)	1	10

*Endotracheal intubation and catheter placement.

As shown in Table 2, the procedures most commonly cited as being difficult were referent to more complex care, such as those related to mechanical ventilation and invasive monitoring, as well as simple procedures, such as maintaining the patient's privacy and body hygiene.

Table 3 presents the equipment which the nurse has the greatest difficulty using when providing medical services to critical patients.

Table 3 - Frequency of the most difficult equipment to use when providing medical services to critical patients in the ER, as reported by the nurses at the University Hospital of Londrina, PR, Brazil, 2010

Equipment	N	%
Mechanical ventilator	4	40
None	3	30
Invasive monitoring	2	20
Hemodialysis equipment	1	10
Multiparameter monitors	1	10

The respirator was mentioned as the most difficult equipment to handle among those used with critical patients. In addition, a considerable number of nurses reported having no difficulty with the equipment.

The following questionnaire concerns the interference in the sector's daily routine with critical patients, if it exists and what it is.

Among the nurses, 90% (9) reported that the presence of critical patients affects the sector's daily routine, while 10% (one) reported no interference, as it was already a part of her ER daily routine.

Table 4 lists the interferences reported by the nurses.

Table 4 - Frequency in which the presence of a critical patient interferes in the ER's daily routine, according to that reported by nurses at the University Hospital of Londrina, PR, Brazil, 2010

Interference	N	%
Staff dimensioning	6	60
Allocation of material resources	4	40
Allocation of physical resources	2	20
Care for other patients is reduced	1	10
Changes the dynamics of the sector	1	10
Increase in the waiting time to receive care	1	10
Inadequate care	1	10
Embarrassment to the other patients	1	10
Special care	1	10

The main interference described by the nurses was related to staff dimensioning, followed by the use of material and physical resources.

The survey participants were also asked what strategies they would suggest to resolve, minimize, or work under better conditions with critical patients in the ER. Table 5 presents these suggestions.

Table 5 - Strategies suggested by nurses to resolve, minimize, or work under better conditions with critical patients in the ER at the University Hospital of Londrina, PR, Brazil, 2010

Strategies	N	%
Increase the number of hospital beds in the ICU	4	40
More human resources	4	40
Staff training	2	20
Group critical patients together	2	20
Attend only to referral patients	1	10
Reserve beds and equipment for critical patients	1	10
Teamwork	1	10
Give priority to critical patients	1	10

According to Table 5, the most common suggestions made by the nurses were related to an increase in the number of hospital beds in the ICU and the hiring of more staff, both mentioned by 40% of the nurses, neither of which is within the nurses' power.

DISCUSSION

The lack of material resources was considered the main difficulty faced when providing medical services to critical patients. The nurses reported that, due to the severity of these patients' conditions, continuous monitoring has become necessary, which is not possible with all patients due to the lack of multiparameter monitors.

Likewise, nurses must make the necessary equipment available, which many times must be borrowed from other sectors, which demands time and their subsequent absence from their sector. In addition, nurses often times must remove the monitors from less severe patients to be installed for use with another more critical patient. These professionals must also assume responsibility for their actions and make clinical decisions to prioritize the monitoring of a more unstable patient, despite being aware of the importance of monitoring both patients. As a result, the nurses must confront this conflicting situation daily, in turn becoming accustomed to these conditions and constructing their own priority criteria.

Material resources are essential to providing proper medical care to the patient.¹³ Aimed at ensuring that medical services provided to users are not interrupted due to a lack of quantity or quality of materials, the management of material resources thus becomes crucial. It is therefore understood that the nurse plays a key role in this environment, particularly in more dense technological services that attend to users with a higher degree of complexity.¹⁴

Despite the undeniable relevance of the technological apparatus as a key tool in intensive care, as well as that of the professional's skill to use their own knowledge to provide risk-free medical care, the non-observance of the need for organization concerning technological surveillance and proper in-service training can lead to a psychophysical overload in these professionals' lives.¹⁵

Referring back to Table 1, what appear in second place as one of the main difficulties are the lack of nursing staff, the lack of specialized human resources, and the lack of physical resources, all of which were present in 50% of the questionnaires.

It was expected that the lack of human resources would most likely be the most common answer, given that the nurse is responsible for drawing up the work schedule and for the distribution of daily activities, which must constantly be changed when a critical patient is present in the sector. However, only half of the professionals mentioned this difficulty.

Thus, it is up to the nurse to predict the sufficient quantity of professionals that will be needed to execute the work, basing their choice on the methodology of nursing staff dimensioning.¹⁶

Referring again to the COFEN Resolution 293/2004, this regulation establishes that, for intensive care, 52% to 56% of the nursing staff must be made up of registered nurses, and the

remainder of nursing technicians; however, what can be seen is that this is not what truly happens in this studied hospital. Although not referent to the ICU, the ER constantly requires intensive care. It has also been observed in other studies that the percentage of registered nurses allotted to provide medical care to patients who need intensive care is less than that set forth in the Resolution for this category of workers, but this is the reality found in many healthcare services.^{16,17}

Nevertheless, according to that reported by the nurses when they suggest that the main difficulty is the lack of human resources in the nursing staff, none mentioned the nursing category specifically as being sparse, always referring to the nursing staff as a whole.

Once again, it should be noted that in the ER the number of workers is pre-established, but the number of patients varies, and in the ICU, the number of patients can never surpass the number of hospital beds, nor, consequently, the resources necessary to provide healthcare services. There is also the added difficulty of convincing workers to work overtime, as many of these professionals work two jobs.

In addition to compromising one's health and the quality of life of the workers, the lack of nursing staff directly influences the outcome of the services rendered, prolonging the hospitalization time and increasing patient treatment costs.¹⁵

The adoption of a system to identify the workload has been the key to planning the appropriate quantity of nursing professionals.¹⁸ Therefore, it is necessary to understand the indicators of the nursing staff's workload to make it possible for nursing managers to apply the appropriate methods to determine the proper dimensioning of the nursing staff in the ERs, both to ensure the quality and safety of the healthcare services and professionals as well as to sustain the institution itself.¹⁵ The healthcare services provided at this university hospital use the Patient Classification System, according to the degree of dependency to help determine the appropriate dimensioning of the nursing staff.

In a study published by Oliveira and Souza,¹⁵ these authors proposed a new methodology to evaluate the workload of nurses in the different sectors of the ER, considering that this sector, according to the location of the healthcare service itself, must deal with a wide range of patient profiles with special needs. These authors cite the examples of triage with risk classification, the emergency room itself, adult and pediatric observation, the medication room, and procedures. In this sense, the time indicators were identified for the different areas of the ER in general, contributing to the calculation of the size of the nursing staff necessary to execute this type of service.¹⁵

The absence of a specialized nursing and a medical team was also identified as one of the main difficulties in working with critical patients in the ER. The ICU is made up of special-

ized intensive care personnel as well as a nursing staff that has been trained and specialized in intensive care, which makes all the difference in providing high-quality healthcare. It should also be emphasized that the profile of the urgency staff is distinct with reference to the intensive care staff, whose conduct is quite different from that of the medical staff.

Nonetheless, this university hospital does count on a rapid response team (RRT), made up of intensive care doctors and a physical therapist, who, on a daily basis, evaluate the patients who are waiting for a space in the ICU, called *unmet demand*, following up on the patients and helping to make treatment decisions. This service was implemented in this hospital in 2009 and is also responsible for urgency and emergency care throughout the hospital, always activated by the nurse by cell phone.

However, the presence of the RRT in the hospital covers only the lack of specialized medical staff, having no direct impact on the workload of the nursing staff.

As regards the lack of physical resources, the nurses' work is directly affected, since the nurses are responsible for finding available spaces for patients, analyzing the needs of each patient and fulfilling them whenever possible. Moreover, each reallocation of a patient must take into account the redistribution of the nursing staff.

The management of physical and environmental resources in nursing consists of the nurses' participation in the allocation of resources, aimed at organizing or generating, on a daily basis, a healthcare unit that provides safety, comfort, and privacy to patients and that assures appropriate work conditions.¹⁹ However, nurses do have their limitations, given that they work in an unpredictable and, in the majority of cases, overloaded environment.

The reallocation of patients within the ER is constant, especially since not all hospital beds have medicinal gas networks. New patients arrive continuously, be they spontaneously or by referral, and must also be allocated according to the needs.

It is important to emphasize that the referral patients are, in most cases, brought by public pre-hospital healthcare services. SAMU is a component of the urgency healthcare policy and is responsible for clinical urgency and emergency healthcare services in this city of this study, while the Integrated Service for Emergency Trauma Care (SIATE) is responsible for attending to calls referent to traumas. It is important to note this latter is a component of the Brazilian police and firefighter service, which already existed even before SAMU was implemented; however, today, they work in an integrated fashion, even though the phone numbers – 192 for SAMU and 193 for SIATE – are distinctly different.

When the issue is critical patients, nurses provide direct healthcare assistance more frequently than they do with other patients. More complex medical procedures, such as those in-

herent to the ICU, end up being performed by the nurses. This explains the fact why the handling of mechanical ventilation and arteriotomy are the most commonly reported problems, due to their difficulty in execution, in addition to maintaining the patient's privacy, all of which were present in 30% of the answers.

Taking care of the mechanical ventilation become the responsibility of the registered nurse, since, in addition to the fact that this professional is subordinate to the nursing staff, the nurses' aide/technician does not have sufficient knowledge to operate these machines, always reporting to her immediate boss.

In the ER, there is no permanent physical therapist, only a few scheduled appointments are performed by the residents in respiratory physical therapy, as are daily visits from the RRT. The registered nurse is therefore responsible for monitoring the appropriate care to be taken with the mechanical ventilation apparatus, ensuring the permeability of the airway and the adequate ventilation supplied to the patient. Therefore, this professional must be present 24 hours a day.

Maintaining the patient's privacy, which was reported by the nurses as difficult, was mainly due to the fact that the ER has no adequate physical structure to maintain these patients in this sector. Hence, patients must share space with other patients, making it necessary to use screens to ensure what little privacy they can when providing healthcare services. Moreover, there is an excessive flow of people, patients, family, students, and professionals, with little to no control of the number of people who circulate within the unit.

Another relevant issue is the constant presence of patients lining the hallways, waiting for a room, sometimes even for days. In this situation, maintaining privacy is a rather utopian concept. The patient must simply count on the good sense of the interdisciplinary staff to guarantee this essential right in the most diverse of situations, such as during a physical exam or other such occasions.

The handling and care of invasive blood pressure monitoring, obtained through arteriotomy, was also reported as a difficulty. Although this type of ER monitoring is common, patients may eventually need this parameter, once again falling upon the shoulders of the nurses to assume responsibility for providing the necessary materials for the proper insertion and maintenance of the arteriotomy in an attempt to truly conserve this parameter, in addition to training the staff as regards the correct execution of arteriotomy.

Though the nurse does not actually perform many of the nursing procedures, such as body hygiene and central venous access care, these issues were reported as a difficulty by 20% of the professionals, also illustrating the challenges confronted by the entire nursing staff, as they are solicited to perform highly complex procedures.

In general, the nurses reported that it is not so much the techniques themselves that are difficult, but rather the improvisation needed to execute them. For example, to check one's intra-abdominal pressure, a device has to be improvised, joining pieces such as the cuff measurer, the needle, and the three-way stopcock, thus demonstrating that the resources available in the ER are different and less than those present in an ICU, and therefore must be adapted and improvised.

The process of adapting and improvising materials and equipment has a great potential to cause psycho-physical repercussions to the nurses themselves, due to the circumstances in which they arise, that is, in a context of precarious work conditions.²⁰

It could therefore be verified that the practice of adapting and improvising materials and equipment is included in the situations in which there is a large gap between the prescribed work and the reality of the workplace.²⁰ Even if it becomes necessary to perform adaptations and improvisations in their daily work, it is the professional's responsibility to work toward the promotion of the patient's well-being and to practice risk-free care. In this sense, the Nursing Professionals Code of Ethics ensures the responsibilities and duties of the nursing staff upon establishing the following, in article 12: "to guarantee to the person, family, and all involved nursing care that is free of harm resulting from misconduct, negligence, or imprudence."^{21:5}

The lack of ICU nurse prescriptions shows that the nurse perceives the need for better controls of the water balance and of other such data, which cannot be conducted with the conventional nursing prescription, even though they are imperative in order to provide the proper healthcare service to the patient. With the conventional nursing prescription, these professionals improvise with the available spaces and locations set aside for the noting down of important data necessary to provide the proper assistance to the critical patient, such as the volume to be injected of vasoactive drugs, sedation, and water balance.

Some nurses also reported that no procedure was the most difficult, but rather that there were more frequent procedures in the ICU, of which they had less on-the-job practice.

Table 2 illustrates that, in the ER, certain procedures occur that are specific to the ICU, but, as there is no space available in the ICU for everyone who needs ICU care, the critical patients are commonly kept in different sectors, receiving treatment that is as close to appropriate as possible.

As this is an ER, in addition to providing medical services to patients in severe conditions, the professionals must also provide services to arriving patients, regardless of whether or not it is actually an urgent condition. This shows the improvisation, in the face of the scarcity of resources, and the unpredictable events that occur simultaneously with the need for higher technology to properly treat the critical patient.

Therefore, the prolonged presence of the critical patient in the ER causes an even longer waiting time for users on the ICU waiting list.

In this sense, it is convenient to cite that, according to the Network of Urgency and Emergency Care in SUS, presented in the reformulation of the National Policy of Urgency Care, strategies, such as the formation of horizontal relations, interaction, and integration among the main issues, with primary care as the center of communication, and the potential to resolve problems at each level of healthcare service, user embracement with classification of risk, and regulations of access to healthcare services contribute to a better allocation of the available healthcare resources.⁵

It is impossible to organize tertiary urgency and emergency hospitals without removing from them the large number of patients with less urgent conditions. By contrast, for the people with urgent conditions that require a lesser level of technology to receive the proper care in primary health services, it is necessary to implement a care model that meets the demands of chronic conditions, so that less urgent conditions can be treated and, over the middle and long terms, reduce the demands at larger urgency and emergency clinics.²

As regards the equipment used when providing medical services to critical patients, the respirator was cited as the most difficult piece of equipment to handle among those used with critical patients, appearing in 40% of the answers. This demonstrates that this is a complex piece of equipment that is constantly used with critical patients, which requires continuous training of the entire staff. Once again, the nursing professional is responsible for the handling and care of the equipment, which requires a more profound knowledge of physiology and respiratory physiopathology, as well as the correct handling of the parameters and ventilator modalities, always paying close attention to the possible changes in the patient's state of health.

Among those who reported having no difficulty with the equipment, one professional reported already having had experience in ICUs when explaining her response. It is important to have professionals who are trained and confident to provide medical assistance to critical patients, especially when referring to the nurse, who has the function of coordinating the sector with human, physical, and material resources as well as of systematizing the nursing care.

The invasive monitoring was also reported as a difficulty attributed to the lack of materials due to the constant substitution of equipment, with many monitors remaining incomplete, which occurs in the ICU, given that all ICU beds have their respective monitors. Proper invasive monitoring demands greater surveillance and an increase in the nurses' workload.²² It is important to note that improvisation once again weighed in heavily in this pre-requisite, reverting to the aforementioned

method of checking the intra-abdominal pressure. In addition, when there is a need for an arterionomy or an online PVC, great difficulty is also encountered in setting up the system, having to search for the missing pieces needed for invasive monitoring, in turn demanding greater time and generating more stress.

The hemodialysis equipment, reported by one professional, is not as troubling, since, in this university hospital, dialysis sector workers handle the hemodialysis equipment and are present from the beginning to the end of the dialysis therapy. However, this condition does not exempt the nurses from the responsibility of maintaining the life of the patient. The nurse must pay close attention to the vital signs of the patients during and after this procedure, in addition to filling out the proper paperwork.

Referring to the interference in the sector's daily routine due to the presence of a critical patient, this study questioned if this truly exists and, if so, what were the interferences.

The majority of nurses (90%) reported that the presence of the critical patient directly impacts the sector's daily routine, but for 10% no interference occurs, since this situation is already a part of the ER's daily routine.

The main change reported by nurses concerned the staff size, which was present in 60% of the answers, justifying that the number of workers always remains the same, with the need for the redistribution of the staff, given that the critical patient demands more time from the professional, and it is the registered nurse's responsibility to distribute the daily tasks to the nursing staff.

The prediction and provision of material resources appeared in 40% of the answers, also including the need for the redistribution of available resources, which is the responsibility of the registered nurse, who, faced with the scarcity of material resources due to the excess demand, must use her own clinical rationale to determine which patient needs the equipment more urgently, in turn giving priority to the more severe cases.

The nurse is also responsible for allocating the patients within the available physical space. This data was reported by 20% of the nurses as a change in their daily routine. With the presence of the critical patient, there is often the need to re-allocate the patients who are already receiving medical care in order to provide greater space for the critical patient, which is also necessary to accommodate such equipment as the mechanical ventilator and the multiparameter monitor, or even to place the patient near a gas network.

Only 10% of the nurses reported that one key interference in the sector's daily routine with a critical patient is that the medical services offered to the other patients are reduced. As already mentioned, faced with the lack of resources to attend to the excessive patient demand, the professional must give priority to the critical patient, placing the patients with less severe diagnoses on a second tier of urgency.

Once again the insufficiency of the healthcare services system to deal with urgency and emergency care demonstrates the inadequacy in the potential to produce solutions at the varying levels of healthcare assistance, in which the customers classified under a reduced degree of complexity could have been contemplated in the primary or secondary healthcare services, in turn "lightening up" the tertiary ER and providing a shorter waiting time, thus contributing to the correct allocation of healthcare resources.

The only professional who reported no interference in the sector's routine explained that the presence of the critical patient is already part of the daily routine in this healthcare unit and that she has become indifferent as she has gotten used to this situation. This answer confirms the daily presence of patients who await available spaces in the ICUs, referred to as an unmet demand.

It was also mentioned that the presence of the critical patient in the healthcare unit causes sound pollution and, consequently, stress. The critical patients in the ER is a definite stress factor for nursing professionals in Brazilian hospitals, as is the level of noise from the devices being used and the flow of people within the unit.²³

The main stress factor for the nursing staff is the workload and the lack of workers, which interferes in the quality of the healthcare offered and frequent confrontation among nurses, patients, and family members, in turn requiring greater ability on the part of the professional to maintain control of the situation.²⁴

Moreover, the activities legally allotted to the nurse demand full attention, discernment, and responsibility, causing the psychosocial factors unleashed by this professional's work activities to give rise to stress in the workplace.¹⁸ It is well-known that in the hospital environment, especially with critical patients, due to the daily interaction with the severity of diseases, with human suffering, and with death, nursing is considered a highly stressful profession when compared to other healthcare professionals.²⁵

Concerning the strategies suggested by the survey participants to resolve, minimize, or work under better conditions with patients in severe conditions in the ER, most are solutions that are unlikely to occur in the short term, as the nurse has no power to implement these measures. However, some of the suggestions can possibly be implemented by this professional.

The training of the staff and the grouping of critical patients together were described as solutions in order to work under better conditions with the critical patient in the ER, who remains in the sector for a prolonged amount of time, data which was present in 20% of the answers.

It is important to emphasize, as regards the training of the staff, that the development of nursing personnel is not only the responsibility of the nurse herself in continuing education (CE),

but must also be shared with the nursing assistants and nursing managers,²⁶ with daily interventions. To plan these CE activities, it is necessary to begin with the nursing professional's reality, raising questions regarding their needs and expectations, problematizing, discussing, offering theoretical support for the nurse herself to realize her potential and limitations, adapting or not to her practice, and recognizing her commitment to the ill patient, in an attempt to put forth proposals to transform the person and her reality.²⁷

From this perspective, what stands out is the relevance of CE and of the people in the process of reducing health risks, since the safety of the patient depends, among other aspects, on communication hinged upon mutual respect, on the flow of high quality information, on organizational learning, and on the managerial commitment to knowledge and shared leadership.²⁸

The practice of grouping critical patients together is already done by the majority of nurses, since it is these professionals' responsibility to decide where to place each patient. This conduct is quite interesting, since, upon grouping the critical patients together, they can place the patients with the most highly experienced professionals. In some situations, the patients can even share a monitor, such as the oximeter, which can facilitate the monitoring and evaluation performed by the nurse, since these patients are all located near each other.

Considering the suggestions presented in Table 5, it could be observed that the nursing professional often has no power or governability, as in the issues of adequate physical space, the hiring of more workers, the increase in the number of ICU beds, the provision of all necessary material resources, which can generate a sense of frustration within the worker. Nevertheless, many suggestions mentioned are related to the governability of the nursing professional, given that the nurse does have the power in the majority of cases, such as with training; the restructuring of the work schedule; periodic meetings with the staff; the speeding up of the transference of critical patients; the encouraging of residents, interns, and on-call personnel to optimize the potential for resolutions regarding other healthcare services; the allocating of the patients in the best possible manner within the available physical space; as well as the avoiding of overtime with untrained personnel.

It is believed that this measure would help to improve the quality of healthcare services and the work conditions of the staff, since they are directly interlinked.

All things considered, one can see the importance of the nurse as an individual who is responsible for managing healthcare services and guaranteeing that these critical patients, as well as all other patients, receive the highest quality medical care possible. The nurses, therefore, play the role of a transformer within the context of the work conditions and the healthcare services rendered.

In this aspect, it is also important to reflect on the health of the worker, since, to obtain high quality medical care, it is imperative that these workers also receive special attention regarding their own state of health. It is evident that the heavy workload faced by the staff, coupled with the work conditions that they must face, will inevitably cause considerable repercussions in the overall health of these workers.

In a study carried out with nurses who work with urgency and emergency care, aimed at analyzing the perception of the stress in the workplace experienced by these professionals, the survey participants described stress factors in a variety of ways, including physical and mental exhaustion, as they must work two jobs; the lack of staff; and the precarious work conditions, thus raising the possibilities of developing stress in the workplace.²⁹

Therefore, the study of the work conditions allows the worker and the healthcare institutions to identify the problems and, by debating these issues, decide upon the necessary changes in the work process that will contribute to the improvement of the work conditions, thus influencing the promotion of healthcare and the prevention of disease within nursing professionals.³⁰

CONCLUSION

Considering the data presented and debated herein, it therefore becomes possible to confirm the hypothesis of this study, which defends that there are in fact difficulties in providing proper medical care to critical patients who must remain in the ER, mainly due to the lack of physical, material, and human resources, among other obstacles, coupled with the ever-increasing demand from both critical patients and those with less complex illnesses.

Hence, according to the main difficulties reported by the nursing professionals, this study proposes some key strategies.

The lack of material resources was the main difficulty reported by the professionals. When the immediate acquisition of new materials is impossible, what is suggested is the preventive maintenance of the equipment and the limited use of permanent and consumption resources, together with the staff's full awareness of the problem.

As regards human resources, this study has shown that the nursing staff has no power to hire more workers; however, the nursing managers can resort to indexes that measure the nursing staff's workload and even make use of the patient classification system in the sense of the degree of dependency, which can indicate the need for more human resources in this sector, aimed at attending to that set forth in the COFEN Resolution 293/2004.

Moreover, it is imperative to invest heavily in permanent education, as it will contribute to the enhancement of the

quality of nursing care and to patient safety, since, despite the lack of resources, nursing professionals are responsible for taking care of lives and must always seek to provide the highest quality healthcare possible, assuming this commitment together with their responsibilities to care for their patients.

As regards physical resources, what can be done in the short term is, as much as possible, to allocate patients according to their needs, which is the role of the nurse, who will have to make use of clinical rationale, considering the aspects that will influence the quality of the healthcare services rendered as well as the redistribution of the nursing staff. Maintaining critical patients grouped together, when possible, as suggested by the survey participants, is also an interesting strategy.

It is well-known that the ER is an environment that is rather unknown to the majority of the population. And that, due to its work dynamic and specificity, it is considered to be a location of risk, a generator of distress and suffering that can be avoided/minimized if the workers (not only the nurses, but all of the ER staff) receive the user and their family members as best as possible, with maximum safety, regardless of their work conditions.

The main limitation of this study was the fact that it included only nurses themselves and did not contemplate the nursing staff as a whole, which would enrich this study. In this sense, new research on the theme is warranted, especially that involving the entire nursing staff, which can significantly contribute to better portraying this reality, helping to propose new solutions.

It would also be interesting to include not only the ER, but also hospitalization units in which critical patients are also present.

This work will be useful in the search for information concerning the main difficulties faced by nurses as regards the providing of proper healthcare to critical patients who must remain in the ER. This study also listed important strategies suggested by these professionals and reveals the need to consider their contributions in the planning of actions inherent to work concerning unmet demands.

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