

Professional practices of education/training of nurses in an intensive care unit

Práticas profissionais de educação/formação dos enfermeiros em uma unidade de cuidados intensivos
Prácticas profesionales de educación/formación de enfermeros en un centro de cuidados intensivos

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ABSTRACT

Objective: To understand the education/training of nurses working in an intensive care unit. **Method:** Case study with qualitative approach, with an intentional sample. Data collection and analysis used different research techniques, mainly document analysis, interview and field observation. **Results:** The data highlights feelings of well-being, satisfaction and motivation as important for education and training in a work context. Some organizational practices seem to promote interpersonal relationships and, consequently, increase the willingness of these professionals to adopt a reward perspective regarding continuing education and training, establishing a close relationship between the formal, the non-formal and the informal. **Final Consideration:** The attractiveness of this organization is related to the valorization and recognition that it can offer to the professionals. There is a reciprocity between a hospital that endorses up-to-date care and professionals who seek scientific evidence.

Descriptors: Hospital Administration; Education, Continuing; Health Human Resource Training; Intensive Care Unit; Nurses.

RESUMO

Objetivo: Compreender a educação/formação dos enfermeiros que trabalham numa unidade de cuidados intensivos. **Método:** Pesquisa qualitativa, recorrendo-se ao modo de investigação estudo de caso, a partir de uma amostra intencional. Para a coleta e tratamento dos dados, fez-se uso de diversas técnicas de pesquisa, privilegiando a análise documental, o inquérito por entrevista e a observação no terreno. **Resultados:** Os dados evidenciam valores de bem-estar, satisfação e motivação dos enfermeiros para a educação e formação em contexto de trabalho. Algumas práticas organizacionais parecem promover as relações interpessoais e, conseqüentemente, a disposição dos profissionais para adotar dinâmicas formativas permanentes como recompensa, instituindo-se uma estreita relação entre o formal, o não formal e o informal. **Considerações Finais:** A capacidade de atração dos profissionais ao hospital está na valorização e reconhecimento que a organização consegue oferecer. Existe uma reciprocidade entre o hospital que legitima a assistência atualizada e os profissionais que procuram a evidência científica.

Descritores: Administração Hospitalar; Educação Continuada; Capacitação de Recursos Humanos em Saúde; Unidades de Terapia Intensiva; Enfermeiras e Enfermeiros.

RESUMEN

Objetivo: Entender la educación/formación de enfermeros que trabajan en un centro de cuidados intensivos. **Método:** se trata de una investigación cualitativa, en la que se ha recurrido, partiendo de una muestra intencional, al estudio de caso a modo de investigación. Para la recolección y el tratamiento de los datos se utilizaron diversas técnicas investigativas, con preponderancia del análisis documental, el interrogatorio mediante entrevista y la observación en el terreno. **Resultados:** Los datos denotan valores de bienestar, satisfacción y motivación de parte de los enfermeros para la educación y formación en el contexto laboral. Algunas prácticas organizacionales parecen promover las relaciones interpersonales y, como consecuencia, estos profesionales se disponen a adoptar dinámicas formativas permanentes, resultando en una relación estrecha entre lo formal, lo no formal y lo informal. **Consideraciones Finales:** La capacidad de atracción que el hospital tiene sobre los profesionales surge de la valorización y del reconocimiento que dicha organización demuestra. Existe una reciprocidad entre el hospital que legitima la atención actualizada y los profesionales que buscan la evidencia científica.

Descriptorios: Administración Hospitalaria; Educación Continuada; Capacitación de Recursos Humanos en Salud; Centro de Cuidados Intensivos; Enfermeras y Enfermeros.

INTRODUCTION

This study is based on the assumption that management models have an impact on the education practices adopted by an institution, since they define the organizational culture, establish power relations, institute the main possible actions within the contexts, determine the value and importance of things and establish criteria for performance analysis. The study focused on the policies, principles and logic of action that support the practices and strategies of education and training of nurses in intensive care units (ICUs). Our option for the ICU is based on other studies that highlight the practice of nurses in this type of unit, which is distinct from other contexts. If, on the one hand, the ICUs (...) are recognized as contexts that promote quality in health, particularly in innovative nursing care⁽¹⁾, on the other, they are places (...) where most Adverse Events/Incidents (AE/I) occur, because its patients require complex and intensive care, and are more susceptible to errors in nursing care⁽²⁾. In addition, results from other studies highlight the fact that the personal and cultural differences of nursing professionals can influence their decisions, suggesting that managers of these units should give greater attention to social aspects⁽³⁾.

In this research, management models, at an organizational level, are used as analyzers of the education and training practices of nurses in their work context – ICU -, in a Brazilian teaching Hospital. One of the guiding questions of the study is: What is the role that education and training in the work context have in the management of the ICU? We chose to conduct a case study with ICU nurses as protagonists, considering that through this method it is possible to reflect, produce knowledge and design relevant improvements for similar contexts.

The theoretical framework presented here will lead us to an understanding of management models and professional practices in intensive care, aiming to highlight their dynamics and their institutional relationships and allowing us to define an archetype related to work organization, specifically regarding education and training. In this sense, we resort to the proposal of a theoretical analysis model that combines two dimensions: the first one refers to organizational models and dimensions⁽⁴⁾ and the second to models and dimensions related to nurses' education in the work context – the rational-bureaucratic model; the social system model; the political model; the anarchistic model.

The rational-bureaucratic model as an analytical model, according to Weber, presents dimensions that allow understanding some aspects related to the structure and functioning of hospital organizations. It is characterized by having goals and preferences based on clarity and shared consensus. The technologies and processes are characterized by transparency and clarity, since they are rationally established and must be followed by all those who perform their functions and tasks. In this sense, rationality represents a fundamental element, a clear orientation for the development of tasks⁽⁴⁾. Under these conditions, it is assumed that, in this model, training is organized in order to internalize the functions associated with the professional activity and to increase predictability within these organizational structures. There is a greater tendency for the valorization of formal and instrumental training regarding the knowledge and values supported.

The social system model focuses on interpersonal relations and organizational culture as determinants of organizational action. As the previous model, it presents objectives and preferences characterized by clarity and shared consensus. However, technology and organizational processes are considered ambiguous, since the organizational consciousness is vaguely known or vaguely recognized⁽⁴⁾. Traditions, values, norms, organizational principles, hierarchical relations, peer relations, communication within each service and between different services, the importance attributed to work and production, which is called "organizational culture", represent a group of conditions that make the work context a strongly social environment able to develop professional identities. In an organization guided by these principles, it is expected that education will value the informal and/or non-formal dimensions.

The political model highlights other complementary concepts and problems to explain organizational dynamics⁽⁵⁾. This model is based on a set of indicators that its proponents point out as characteristics of the organization, of which the following stand out: heterogeneity of individuals and groups, with their own goals, preferences, power, influence, and hierarchical positions; life within the organization unfolds based on the conflicts of interests and the consequent struggle for power; individual or group interests inside or outside the organization influence all organizational activity⁽⁴⁾. There are frequent debates and discussions regarding basic principles (such as equality, fair play and fairness), leading to major disagreements on matters that are innocuous at first sight⁽⁶⁾, but which are negotiated. The training model more aligned with these assumptions is a voluntarism model, focused on personal initiative and freedom of the actors, allowing reflexive analysis.

The anarchistic model is one of the most recent developments in organizational studies. Its placement at an opposite side from the rational model, due to its differences, creates a repulsion force between the two extremes that also gives rise to a certain force of attraction on other models⁽⁷⁾. The relative autonomy of subgroups, whether professionals in the care units, specific departments or services of the administration, leads to different approaches to identical situations within the hospital organization. With this, the objectives are ignored or conflict. Technology and organizational processes have an ambiguous nature⁽⁴⁾. The formal structural mechanisms are not always closely connected, and the control systems are weaker in action than anticipated, hence the weakly articulated expression⁽⁸⁾. In this scenario, absurdity and fortuity appear as determining aspects, with circumstances or informality as ways of exploring alternative ideas about purposes and conceptions. Along with this organization perspective, of a paradoxical a posteriori rationality, there is also a new conception of education, which can potentially trigger an epistemological rupture, that would allow introducing other questions and problems in this field. This latter would then be the "true training", a transcendental one, insofar as it goes beyond traditional social and educational stratifications and can lead to individual autonomy.

OBJECTIVE

To understand the education/training of nurses working in an intensive care unit of a teaching Hospital (UH).

METHOD

Ethical aspects

The empirical investigation began after obtaining authorization from the Research Ethics Committee of the School of Nursing of the University of São Paulo and the approval of the Research Ethics Committee of the USP University Hospital. After obtaining approval from these Committees, we scheduled a prior meeting with the nurse in charge of the ICU, with the objective of clarifying the objectives of the study, disclosing the methodology planned for data collection, defining the best strategy for its implementation, i.e., for obtaining the voluntary participation of the subjects studied (nurses). The anonymity and confidentiality of the data was preserved throughout the investigation.

Type of study

This was a case study with qualitative approach⁽⁹⁾.

Methodological procedures

Study Scenario

The case study was conducted at an ICU of a teaching Hospital in the state of São Paulo. The choice for this care unit was related to some of its aspects, mainly because it was within an UH located in a country other than the researcher's, hence the interest in understanding the training of the group of nurses.

Data source

The analysis methodology was very similar to ethnographic research, that is, we adopted a naturalistic research paradigm using different techniques, such as document analysis, interview and observation⁽¹⁰⁾.

Document corpus

Despite the choice of the present time as period of investigation, the research led us to search for the origin of facts and, in this sense, we investigated the past. Regarding locale, the development of the study required information on a national level, mainly regarding legal aspects related to education and training policies for nurses. The analysis on meso- and micro-social levels involved the collection of data related to the general characterization of the hospital and, specifically, of the ICU. The *Nursing Activities Score - NAS*, available in the unit, allowed understanding the nurses' workload and their relationship to training in that context.

Interview

The semi-structured interview was chosen as the main data collection technique due to its adequacy for the collection of testimonies about the nurses' practices and perspectives in their daily work in intensive care units. The choice of the nurses who participated in the study was intentional, as they were indicated to the researcher by the nurse in charge of the unit. After that, a

meeting was scheduled to clarify the purposes of the study to the participants. Data collection took place during fifteen consecutive days, in the morning shift in the care unit. Eight nurses were interviewed. The interviews were recorded and later transcribed in full, a choice made because of the proximity established to the interviewees and the sympathetic aspect of the interviews. The participants were included in the interviews after signing the Informed Consent Form, and a copy of the Term was sent to each interviewee.

Observation

The fieldwork was carried out in November 2015. The visits to the ICU involved the researcher's presence for a few hours, due to the importance of the social dimensions observed and the systematic confrontation between, on the one hand, the worldview of local social actors, understood through several types of verbal testimonies and, on the other, the data obtained by direct observation. The use of this method required a field journal used to register observations and meaningful events appropriate to the study, which included two topics – i) work dynamics in the ICU (spaces, times, professionals, patients, methods); ii) actors, work context and training (training processes, workload).

Data collection and analysis

All texts from the interviews were submitted to thematic content analysis, which allowed a general understanding and perception of the meanings in the speeches⁽¹¹⁾. Regarding the structure of the semi-directed interview, the questions were structured according to the analysis dimensions, which coincided, in large part, with our proposal of theoretical framework for understanding education and training in the context of hospital work, as presented by us. The units of meaning were organized and classified according to elements that represented different groups, regrouped in two categories of analysis – i) Category 1 – Management modes of the ICU integrated in an UH; ii) Category 2 – Professional practices related to the education and training of nurses in the work context. Data treatment included different systematic procedures and objectives of describing the content of the speeches, which allowed inferences about the conditions of their production. Each category had "themes or meaningful items", as defined by Bardin⁽¹¹⁾. Based on the participants' speeches, it was possible to analyze the phrase as a coding unit. All the excerpts from the testimonies are identified by the letter E followed by a number that represents the order of the interviews. The present study followed the chronological organization of the three phases of content analysis: pre-analysis; exploration of material; treatment of results, inferences and interpretation⁽¹¹⁾.

RESULTS

Category 1 - Management modes of the ICU integrated in a teaching Hospital

The UH was considered as a reference for the nurses interviewed. Its more horizontal management structure allowed its

actors to adopt a participatory style and work in multi-professional partnerships. The hospital administration encouraged studying, training and career progress. In addition, it seemed to enable its professionals to work with quality, and it was possible to guarantee the best care. In this regard, some interviewees mentioned the following:

[...] there is the incentive to academic training, which I think is singular and different from other places [...] in addition, there's the human resources policy; the salary is very attractive compared to other hospitals in the state [...]. (E2)

The hospital is a reference for nurses, it is a hospital that has the appropriate number of nurses for each unit, [...] the nurse's activities are always focused on the quality of care. (E4)

Theme 1 - Organization of the work of nurses in the ICU

Regarding the organization of nurses' work within the ICU, there were fixed shifts. Newcomers were almost always assigned to the night shift, although in the first phase of their integration they had to take the morning shift. The workload is closely related to quality and safety of care, and is considered fundamental for the calculation of nursing staffing through the instrument that evaluates the nurses' workload (NAS). The following interviewees exposed some facts related to the workload, such as the characteristics of the environment, the safety measures implemented in the organization, the working conditions and professional satisfaction:

We have an instrument, the NAS and it is updated every day; it is a monitoring document and it can really detect if, for example, more than a nurse is required in the first days. (E3)

The workload is excessive because you end up doing two jobs, you see? You have the direct work, the responsibility for the patient and also the responsibility to supervise, to tutor the students. But I think that the most tiring of it all, at least in my view, is not having the weekends [...]. (E6)

The ICU is characterized by technological sophistication. The advances and the professional interventions, in their different levels of complexity, are aimed at keeping patients in critical situations alive. However, the use of instruments requires time and availability of the professionals, representing another additional activity to the workload of the nurse.

Theme 2 - The presence of a leader

All the interviewees considered the presence of the head nurse as essential to coordinate the unit and motivate professionals to work. Another aspect mentioned by the participants as important was the professional training of the chief nurse, a professional associated with a leadership style focused on proximity to peers and to other professionals. One of the interviewees said that:

[...] our chief, for example, has a master's degree in management, now he is in a doctorate in management, he knows the laws, he knows the professional/patient ratio, so if you talk to him and he answers with those arguments, it conveys confidence [...]. (E1)

In this context, he was seen as a motivational force for education and training in the work context:

[...] we can have a good relationship with the chief and with the other colleagues to keep doing our activities outside work; I am currently in a specialization in hospital infection and this is good for the hospital, but collaboration is necessary for this. (E1)

Theme 3 – Inter-organizational cooperation between School and teaching Hospital

The opinions were unanimous regarding the existence of a reference human resources policy, since the hospital and the school are linked to a renowned university, which has policies that encourage academic studies and education in the work context:

[...] the administration of this hospital is specially focused on encouraging study, training and the professional career [...]. (E2)

The training articulated with the school was considered "of excellence" and challenging, when it came to assisting students during their internship:

[...] we try to provide the maximum amount of knowledge in intensive therapy to the students, it is one of the most praised fields of the School of Nursing. (E8)

Category 2 - Professional practices related to the education and training of nurses in the work context

Regarding education and training occurring inside the UH and in the work context, there seemed to be a reward dynamic involving permanent education and training, establishing a close relationship between the formal, the non-formal and the informal. In this study, the formal aspect was stimulated by the individuals themselves, who considered it fundamental to deal with the highly specialized work context:

[...] most of the nurses here are in masters, doctorate courses; the training is very good... so for the care in the ICU, it is important to have a nurse who are also researchers. (E4)

The non-formal aspect, which is aimed at personal and professional development, occurred through events organized and structured by the hospital/school itself, or by small groups formed within the work contexts. These events were intentional, and had duration, institutional support and learning objectives determined and known by the participants:

[...] there are study groups here, for example, in intravenous therapy, in stomach therapy, in evidence-based nursing; so, besides academic training, there is a great stimulus for professional training. (E2)

Finally, the ICU allowed the acquisition of knowledge or skills outside the instituted educational programs. It means that we are dealing with contexts rich in experiences that allow informal learning. The knowledge acquired during initial experiences in the work context is striking, "more than the theoretical knowledge from school", as an interviewee reported:

The initial experience, the examples you have with the nurses, the first nurse you meet when you start working in a hospital, depending on how he is, his abilities, his attitudes, his knowledge, you kind of shape yourself, either because you admire this person or the other way around. (E2)

[...] the assistance itself... there seems to be a moment when you say 'now I have nothing else to learn'; but then there is a new case, something you have never seen, that you did not remember. (E2)

Theme 1 - Training Processes

Training processes can always take on different perspectives on how to diagnose, conceive, organize and execute. Training processes occurred in formal, non-formal and informal dimensions, a result of factors such as: the HU as an organization, the objectives and preferences of its actors its, technologies and processes, the training model and the training processes themselves. The various training modes, identified by the letter M (Mode), were explained by the nurses, such as: M1- orientations to students in clinical education and internship; M2 – period of introduction to the profession; M3 – work and study groups; M4 - hemodynamic instability of patients and interaction between professionals; M5 - training dynamics organized in the work context; M6 – shift changes. These modes were expressed in the following statements.

M1- Orientations to students in clinical education and internship

[...] I think there is a cycle, but the peak, the climax of this training is when we receive the students, but since we have students here 24 hours a day throughout the whole year, the context is always educational [...]. (Eb8)

M2 - Period of introduction to the profession

[...] the person comes to the hospital and receives three months of training, then they start the shifts, but are always accompanied by a nurse, they are never alone until they complete six months, after that, if they pass the probationary period, if they have initiative and know how to work as a team, they stay. (Eb4)

M3 - Work and study groups

[...] in here we also have case studies. Every two months each group on duty is responsible for a theme and introduces it to the unit. Then we try to talk about the subject within our practice and seek literature on that theme. (Eb3)

M4- Hemodynamic instability of patients and interaction between professionals

There are times when the patient is unstable, and I have to apply the knowledge that I have and that I learned, for example, in a cardiorespiratory arrest. (Eb4)

M5 - Training dynamics organized in the work context

[...] we also do what we call 'ICU wheels'; where every two months some nurses take a case study, a case that is of interest to the ICU

and investigate what is the care required, what are the evidences of this care and present it to the group. (Eb7)

M6 – Shift changes

Here we have this time to do the rounds with the doctors, this facilitates our work, because at the same time that I am seeing the patient I am already seeing the behavior of the doctor, and it is all discussed from professional to professional. (Eb5)

DISCUSSION

Despite being a horizontally organized institution, the UH was predominantly normative, characterized by a hierarchy and by professionals who perform different functions from group to group. That means that the work of these professionals was conditioned by their training (or their socialization), and even before they started working they were already internalizing the values and knowledge required⁽¹²⁾. Still within the hospital organization, we can highlight another characteristic, evident in the ICU: the complex environment, which is related, to a certain extent, to the presence of technology⁽¹³⁾. In an environment characterized by specialization and fragmentation of work processes⁽¹⁴⁾, the team, often focused on mastering the machines to deal with the disease, found its greatest challenges in the process of perceiving the technologies⁽¹⁵⁾ and in the systematization of care⁽¹⁶⁾.

The analysis of the articulation between the School and the UH had a decisive role for understanding "(...) the collective actors, the professionals (teachers and nurses) and the benefiting agents (students and patients) who need care (...) "⁽¹⁷⁾. The organizational leadership and the personal influence of the leader have been pointed out in several studies as conditions for creating high quality professional environments for nurses⁽¹⁸⁻²¹⁾. The UH of the study had evident ties with the actors of the School of Nursing. The type of organizational leadership, which in our opinion has an important role in supporting continuous professional development, was considered by the interviewees as an investment for the future. The interviewees' description of the leader of this work context pointed out qualities close to those of an executive, such as loyalty to the organization and to its goals, courage and tact, flexibility, among others⁽²²⁾. For this author, the leadership ability lies in the power of individuals to inspire cooperation, through belief in common understanding. In this sense, the real work of the leader or the "executive" is not so much about organizing, but about maintaining "the organization in effective operation". This is one of the specific assumptions of human relationships and, as such, it lies within some dimensions of the social system model⁽⁴⁾.

Nurses' statements about the organization of the UH, its management modes and education and training in the work context, in the light of our theoretical framework, revealed distinct emphases regarding the units of analysis encountered. On the one hand, it seems that some of the work developed by nurses have inevitable bureaucratic dimensions and, on the other hand, there are work processes that lead us to believe that there are also other dimensions, closer to a political or even anarchistic model⁽⁴⁾, which have positive effects on the education and training of these professionals. The decisions made within the hospital organization are based on the power and influence of different individuals and groups, and

basically result from processes aimed at serving personal interests. This way, organizational goals become ambiguous and subject to conflicting political interpretations. Conflict is part of a natural and inevitable process, which may lead to improvements of the work within these services. Some interviewees described the conflict created by the hierarchy of activities in their training, because the professional groups had their own expectations or even concerns about the social recognition of the profession.

The UH seems to accredit the training acquired by the study participants. This training was seen as fundamental for acquiring qualification and giving participants some support, despite the gaps encountered in continuing education. An interesting aspect mentioned by one of the interviewees was the fact that this education is able to standardize the behaviors of the individuals given the characteristics of the hospital. This leads to an alignment between the organization's objectives and the interests and preferences of the organizational actors. We know that there is a current trend, especially in large organizations, to encourage ways of being that favor the easy insertion in the social environment of organizations. This way, the institutions favor individuals who are easily adaptable to insertion in diverse groups, aligning their motivations and aspirations with the career profiles within the organizations⁽²³⁾. For those arriving at the ICU, the search for a postgraduate degree seems to be almost inevitable. One of the interviewees point to two factors that lead to self-training and formal training; one of them is the fact that the complex environment in intensive care generates pleasure, suffering and stress⁽²⁴⁾, and the other is the contact with students. Therefore, training within the care unit follows distinct paths, with more or less organized actions, or even spontaneous actions, but all interdependent. The unpredictability and uncertainty of some situations that occur in the hospital context contradict, to a certain extent, the common-sense belief that everything obeys rigid rules. The need for interaction among peers is seen as formative for nurses, and in this scenario, there may be power games, conflicts and consensus, which often instigate educational demands. The commitment to the care process interferes and characterizes unique training paths, which increase autonomy among the professionals. As a result, participation in training may be intense, but at the same time inconsistent, depending on the actors' initiatives and freedom⁽²⁵⁻²⁷⁾. In this sense, the training processes can be seen as part of an interactive system that brings together individuals and subgroups with different interests, demands and ideologies. Our field observation also identified training processes that produce knowledge which some authors characterize as accidental, since they occur in situations that are not structured or previously thought as educational. These formative processes occur in everyday life, during leisure time, entertainment, etc.⁽²⁸⁾. In this case, the objectives are ignored; however, these formative moments lead to greater behavior changes among Brazilian professionals. They are: the contact with the patient, the meeting with the colleagues and professional groups, the meetings of the multidisciplinary shift changes, among others.

With the data from this research it is possible to perceive that nurses highlight well-being, satisfaction and motivation as important for education and training. Some organizational practices seem to promote interpersonal relationships and,

consequently, increase the willingness of these professionals to adopt a reward perspective regarding continuing education and training, establishing a close relationship between the formal, the non-formal and the informal.

Limitations of the study

Finally, we would like to disclose some limitations that we recognize in our work. Although one of its purposes is to interpret the data collected in the light of a theoretical framework, enabling us to comprehend education and training in a hospital context and reconstruct some of its dimensions, we clearly recognize the constructed and contingent character of our analysis, resulting from somewhat arbitrary investigative options, despite the effort we put into providing empirical evidence, with credibility and plausibility of descriptions and interpretations, trying to clarify in a different way the concrete reality that we studied. Despite the clarity of our theoretical design and empirical confrontation, it was difficult to implement these procedures with the usual instruments of data collection, such as document analysis, semi-structured interview and the field journal, since, among other aspects, the paths of this interpretation were closely related to the tensions between the organizational dimensions and the dimensions of training within the work context of a university hospital.

Contributions to the area of nursing, health or public policies

The different dimensions of organizational models described in this study, highlighted in different ways by the participants, allowed us to better understand the hospital as an organization and the education/training in the context of an ICU.

Finally, with the data presented here, it is possible to generate in-depth reflection on the part of health organizations and ICUs in general, leading to the design of management conditions, improvements and strategies relevant to the development of education/training in the work context.

FINAL CONSIDERATIONS

The study allowed understanding the education/training of nurses working in an intensive care unit of a Brazilian teaching Hospital (UH). The literature based on organizational theories and administration, which we analyzed here, tends to give a greater prominence to the rational-bureaucratic model for understanding the management modes and professional practices of nurses in ICUs. However, this investigation confirmed that there are other dimensions of hospital as organizations that can only be explained by other theoretical models.

The choice for studying the UH as an organization made it impossible to escape from the fundamental questions of the theoretical models of analysis, on which our understanding of the UH and of the education and training within the ICU would depend. This type of unit is characterized by its complex and demanding environment for professionals whose main activity is the continuous supervision/monitoring of specialized care, including: i) complex and varied knowledge, based on scientific evidence; ii) workload assessed through the NAS; iii) biomedical

model focused on the provision of care; iv) clinical data divided by the teams (physicians/nurses). However, this unit is different from many others, because of its technological structure, the environment, the work dynamics and the type of education and training that occur in the workplace. The attractiveness of this organization is related to the valorization and recognition that it can offer to the professionals. In this sense, there seems to be

a reciprocity between a hospital that endorses up-to-date care and professionals who seek scientific evidence.

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