



Relationships and interactions in the Intensive Care Unit environment of care*

Relações e interações no ambiente de cuidados em Unidade de Terapia Intensiva

Relaciones e interacciones en el ambiente de cuidados en una Unidad de Cuidados Intensivos

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ABSTRACT

Objective: To discuss relationships and interactions in the Intensive Care Unit's (ICU) environment of care. **Methods:** A qualitative study that was based on grounded theory. We interviewed 47 subjects in three different Adult ICUs, located in Florianópolis/ SC, Santa Maria / RS and Pelotas / RS, between June 2009 and September 2010. **Results:** In this study, two categories are presented and discussed: "network support; order / disorder and disturbances in the ICU environment" and "living with certainties, uncertainties and contradictions in the ICU environment". **Conclusion:** It is considered necessary to understand the ICU environment using a systemic view. And this means accepting the circularity and dynamics of the order-disorder-organization that continually (re)nourish relationships and human interactions and professionals in this environment.

Keywords: Systemic management; Interprofessional relations; Professional-family relations Professional-patient relations; Intensive care units

RESUMO

Objetivo: Discutir as relações e interações do ambiente de cuidados em Unidade de Terapia Intensiva (UTI). **Métodos:** Estudo de abordagem qualitativa foi fundamentado na "Grounded Theory". Foram entrevistados 47 sujeitos diferenciados de três UTIs Adulto, localizadas em Florianópolis/SC, Santa Maria/RS e Pelotas/RS, entre junho de 2009 e setembro de 2010. **Resultados:** Neste estudo, são apresentadas e discutidas duas categorias: "A rede de apoio, a ordem/desordem e perturbações no ambiente de UTI"; "Convivendo com certezas, incertezas e contradições no ambiente de UTI". **Conclusão:** Considera-se necessário compreender o ambiente de UTI a partir de uma visão sistêmica. E isso significa acolher a circularidade e dinamicidade de ordem-desordem-organização que continuamente (re) alimentam as relações e interações humanas e profissionais nesse ambiente.

Descritores: Administração sistêmica; Relações interprofissionais; Relações profissional-família; Relações profissional-paciente; Unidades de terapia intensiva

RESUMEN

Objetivo: Discutir las relaciones e interacciones del ambiente de cuidados en una Unidad de Cuidados Intensivos (UTI). **Métodos:** Estudio de abordaje cualitativo fundamentado en la "Grounded Theory". Entrevistamos a 47 personas en tres unidades de cuidados intensivos de adultos diferente, localizadas en Florianópolis/SC, Santa Maria/RS y Pelotas/RS, entre junio de 2009 y setiembre de 2010. **Resultados:** En este estudio, se presentan y discuten dos categorías: "La red de apoyo, el orden/desorden y perturbaciones en el ambiente de UCI" y "Conviviendo con certezas, incertidumbres y contradicciones en el ambiente de UCI". **Conclusión:** Se considera necesario comprender el ambiente de UCI a partir de una visión sistémica. Y eso significa acoger la circularidad y dinamicidad de orden-desorden-organización que continuamente (re) alimentan las relaciones e interacciones humanas y profesionales en ese ambiente.

Descriptores: Administración sistémica; Relaciones interprofesionales; Relaciones profesional-familia; Relaciones profesional-paciente; Unidad de terapia intensiva

* Study extracted from the Doctoral Thesis entitled "A sustentação da vida no ambiente complexo de cuidados em Unidade de Terapia Intensiva" – presented to The Post-Graduation Nursing Program – Federal University of Santa Catarina – UFSC – Florianópolis (SC), Brazil.

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INTRODUCTION

In order to attain higher levels of qualification in human relationships and inter-human relations and care in the Intensive Care Unit environment (ICU), it is important to recognize the complex nature of this environment. Therefore, by complex – (complexus) one understands the bond existent between the unit and multiplicity ‘of that which has been woven together’; that is, when different elements are inseparable constituents of the whole, and there is an interdependent, interactive and retroactive tissue between the object of knowledge and its context, the parts and the whole, the whole and all the parts, and the parts among them”⁽¹⁾.

Following this logic, understanding of the care environment in ICU as an interdependent whole, means accepting that different components, such as: the material and technological resources, physical space, and human resources, among them, the health professionals, managers, patients and family members, the supporting services and other intra and extra-hospital health units and services are inseparable, and that the interdependent tissue may be characterized by the attention and care given to patients hospitalized in the ICU, within a health system as an independent whole.

Patients hospitalized in the ICU, in the majority of cases, are weakened and vulnerable physiologically and psychologically as well as spiritually and socially. Therefore, they need full and intensive care to revert the clinical condition in which they find themselves. The importance is therefore emphasized, of offering the patients complex care, also understood as being multidimensional, because of including different dimensions of the human being as a singular and multidimensional being⁽²⁾.

To accept the multidimensional reality, from this focus, means to embrace the care as a complex phenomenon in and for which different services, care and health units converge, in the sense of forming an integrated and integrating whole. It also means embracing and respecting the values, beliefs, culture and expectations of life that are unique to each human being, as a patient, family member or professional. In practice, however, this concept does not always seem to be easy to decode.

Therefore, the present study was based on a part of the Doctorate Thesis entitled “A sustentação da vida no ambiente complexo de cuidados em Unidade de Terapia Intensiva”⁽³⁾, which was based on the following questions of the research: What is the meaning of the care environment? What is the meaning of the care environment in an Adult Intensive Care Unit, experienced by professionals who work in this unit, managers, patients, family members and the professionals of the supporting services?

Therefore, to answer the question: How do the inter-personal and inter-professional relationships and interactions take place in the care environment in an Intensive Care Unit, the aim of this study was to conduct a discussion based on this subject, in the light of systemic/complex thinking.

METHODS

This was a study with a qualitative approach, based on the *Grounded Theory* method or Theory-Based Data (TBD), as this method is also called, characterized as a variant of Symbolic Interactionism. The *Grounded Theory* seeks to understand the meaning of relationships and inter-relations between social phenomena, understanding of reality, and of human life and action in the real world^(4,5).

This study was conducted based on the principles of theoretical sampling, so that data collection and analysis were performed in alternative sequences and comprise four consecutive stages. To compose the theoretical sample, in-depth interviews were held with 47 differentiated subjects, such as health professionals, managers and other professionals who worked in Adult ICUs and patients who were hospitalized in these ICUs, or who had undergone this experience, in addition to family members who accompanied a relative hospitalized in these units at the time of the interview, or in previous time intervals. The interview were conducted in three Adult ICUs, located in Florianópolis/SC, Santa Maria/RS and Pelotas/RS, Brazil, with the purpose of maximizing the variation among the concepts and making comparisons. Participant observations were also made in the Adult ICUs of two hospitals, in Florianópolis/SC and in Bielefeld/Germany. The codification process was performed by means of open, axial and selective coding, in distinct but complementary and integrated phases. For data analysis, the analytical mechanism denominated paradigm was used, recommended by Strauss and Corbin⁽⁵⁾, as a facilitator instrument that involves an organizational scheme that helps to systematically reunite and put the data into order and classify the emergent connections.

In order to comply with the research ethics criteria, the following were taken into consideration: the recommendations of Resolution No. 196/96, of the National Health Council, on researches involving human beings⁽⁶⁾; approval of the Ethics Committee on Research with human beings of the Dean of Research and Extension of the Federal University of Santa Catarina, Process No. 130/09; approval of the Research Ethics Committee of “Sociedade Portuguesa de Beneficência” of Pelotas/RS, Report (un-numbered) of September 8, 2010, in addition to authorization from the respective Boards and Heads of Nursing, of the mentioned ICUs, with the purpose of validating the study proposal and divulging the information.

The proposed objectives and methodology of the study were explained to the study participants, and all the subjects signed the Term of Free and Informed Consent.

RESULTS

After the analytical procedures, two categories were constructed: "The support network, order/disorder and disturbances in the ICU environment" and "Living with certainties, uncertainties and contradictions in the ICU environment". It is pointed out that these categories were structured in this manner due to the fact that they composed adherent themes of the set of categories with reference to the results found in the mentioned Thesis.

1. The support network, order/disorder and disturbances in the ICU environment

The ICU care environment needs to offer a warm reception, be integrative and stimulative to all those involved in the process of care and/or being under care. Professionals and manager, as well as patients and their families need to feel that they are an integral part of this environment, in order to form a network of dynamic relationships and interactions, sensitive to unique human characteristics.

The ICU is a very complex unit, and appears to be an environment apart from the hospital. Therefore, it

may give the impression that it is an independent unit within the hospital, although it is extremely interconnected to and dependent on it. Nevertheless, the ICU continually requires diverse support services from the hospital itself, which provide the ICU with continuous, uninterrupted and priority support, such as Laundry Service, the Clinical Analysis Laboratory, Maintenance Services, Surgical Center, Blood Bank, Hemodialysis Service, Pharmacy, Nutritional Service and others, which provide the ICU with direct support.

Based on these findings, a support network was designed for the Adult ICU care environment, from a systemic perspective of health care, involving the demands directly or indirectly linked to the care of critically ill patients, including the following services and health care units: Support services for the other correlated Units of the hospital, such as the infirmaries and others, Obstetric Center, Surgical Center, Post-anesthesia recovery room, Hemodynamic Unit, Semi-intensive Care Unit, and other ICUs and hospitals, such as those that serve as counter-reference. In addition to these, the managers, health professionals, support service professionals, patients' family members, friends and acquaintances also form a more direct part of this Adult ICU support network. This support network is illustrated in Figure 1 below.

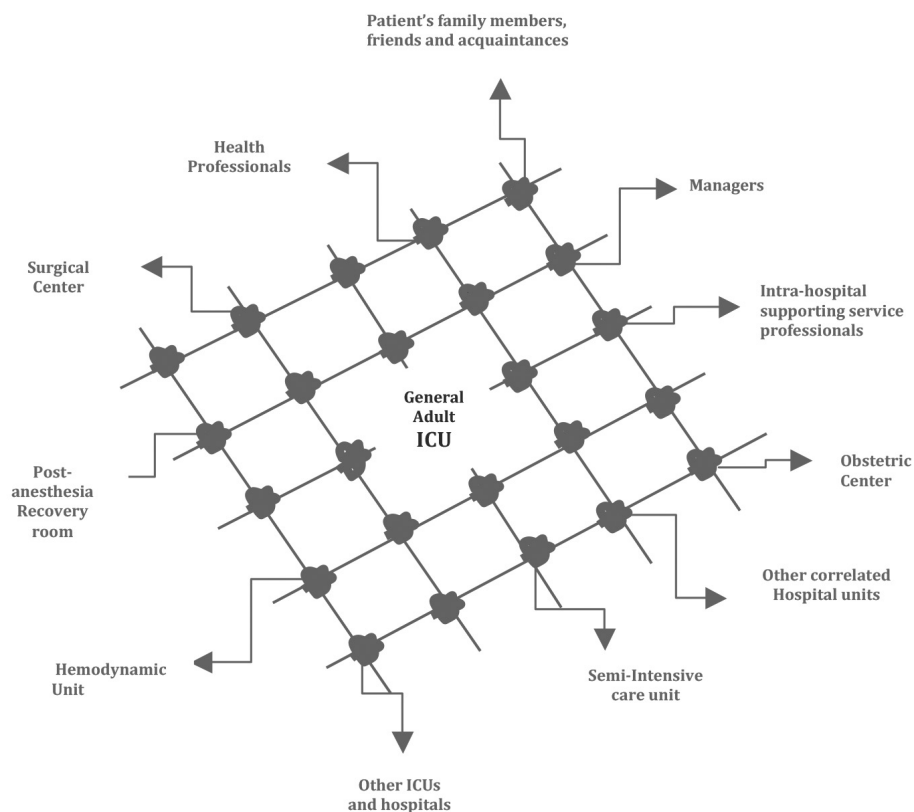


Figure 1. Support network of the Adult ICU environment of care
Source: Backes³ (Prepared by the Authors).

From this aspect, as one of the “knots” becomes undone or one of the threads is not properly interconnected, the network as a whole will suffer maladjustments, imbalances and/or ruptures, and break up. This idea, however, is not always sufficiently clear to the professionals who work in the ICU environment. When one takes as a reference the declaration of a nursing professional, who recently began to work in the ICU, and expressed herself/himself during the phase of observation of the present study, as follows: *“it is a great deal more tranquil to work in the ICU, because in the Medical Clinic it is very stressful due to the family members who, while the patient stays there quietly, the family members bother one a lot”*; it is evident that this professional prefers to care for patients that “stay there quietly”, as do the majority of patients in ICU, in addition to being separated from their family members. Put in another way, one could say that professionals have difficulty in transcending timely and technical care.

From this perspective, the fact of opting to work in an ICU environment confirms that sometimes, one has heard it said that: *“working in the ICU is better because one doesn't have to be involved with the family members”*. Therefore, this statement shows that the family is not always recognized as a component element of the support network and of relationships and inter-relations in the ICU care environment.

For a large portion of the professionals, the family still sounds like “disorder” or bother. The first reaction of professionals when they come across the family members, with rare exceptions, is that of escape, indifference or exclusion. Therefore, the less the possibility of contact with the family, the greater will be the “order”, and the fewer the chances of questioning, disturbances, affective involvement and emotional suffering.

In this study, one of the family members interviewed reported that in the face of the seriousness and worsening of the clinical condition of his wife, the doctor no longer knew what to do, and sought to escape from the family, so as not to speak about the seriousness of the patient's condition, according to the following statement: *“On the day it (the news) was good, he came along laughing. When he came with a frown on his forehead, and head down, you know? Then the news was not very good. Then he would come, only one day we had to hunt for him, but on that day he didn't want to speak, because there in the ICU there had been a stop [his wife had suffered a cardiac arrest]”*. Thus, escaping from the family may be related not so much to the person/family but rather to the one's own reactions and difficulties; that is to say, impotence and fear of being confronted with the vulnerability of others, especially in cases in which it was possible to establish a tie with the family members.

When professionals show their feelings, this allows it to become transparent that in addition to the manifested internal confrontation, frequently due to the incapacity to deal with their own difficulties, professionals also see

the “family member” as a “disturbance”, someone who makes them feel ill at ease and hampers the routine of the unit, and this is also why there are no visiting hours for family members during the morning shift in one of the ICUs studied. Therefore, from the way professionals think, understood as a reductionist manner, the patient is apprehended as an isolated being, disconnected from his family and social relationships.

2. Living with certainties, uncertainties, and contradictions in the ICU environment

In the ICU, the environment marked by high complexity, living directly and constantly with certainties, uncertainties and contradictions is inevitable. The revelation of a diagnosis, clinical condition and/or loss of a patient, are processes that professionals sometimes find difficult.

In their declarations the interviewees showed that the way of being and doing things in the ICU care environment is still permeated by a traditional and hegemonic way of thinking and doing things, motivated by the mechanization and linearity of rules and routines, conceived on the basis of a subject-object relationship. It was also evident that there are few spaces for discussion and dialogic reflection, in the sense of rethinking the certainties and favor new forms of thinking and doing things.

Nevertheless, some of the interviewees indicated that there already were initiatives that gradually aim to transcend timely and linear care in the ICU environment, as they mentioned that the visiting hours of families to patients have been made more flexible, with an increase in the number of hours and duration of the visits. In some ICUs the environment has been adapted to allow patients to have natural lighting and an outdoor view. In addition, there is an ICU in which, whenever possible, patients are encouraged to interact with one another. The families also seek to interact before, during and after visiting hours, thus seeking to show solidarity with one another. They seek to know each other, talk, mutually support one another, particularly in the most difficult times.

Therefore, the fact that the patient is placed in an individual cubicle in the ICU, or stays together with the other patients in the same ward, presents advantage and disadvantages from the interviewees' points of view. So that keeping the patient isolated seems to be more tranquilizing for him/her. However, the human being needs relationships and inter-relations in order not to feel alone and be able to live together with the others, in order to feel alive. Otherwise, to see other patients in a more serious, debilitated condition and see them die could be frightening for a patient who is conscious and in a better condition. These situations indicate the extent to which the ICU environment is complex, and can influence and make a difference in the care and recovery of patients. In addition, it shows the need for conducting other studies

about the physical structure of the ICU, in order to know what is really better for the patients.

Therefore, one could say that the ICU care environment is a live, dynamic and complex one, that involves relationships, interactions and associations among the diverse actors and sections involved; that is to say, among health professionals, managers, patients, family members and other professionals from other units and intra- and extra-hospital services, in an integrated manner, to make intensive, circular, dynamic, singular and multidimensional care feasible, and motivated by the reciprocal inter-dependences. Thus, Figure 2 below endeavors to illustrate this circular and systemic integration of the ICU environment.

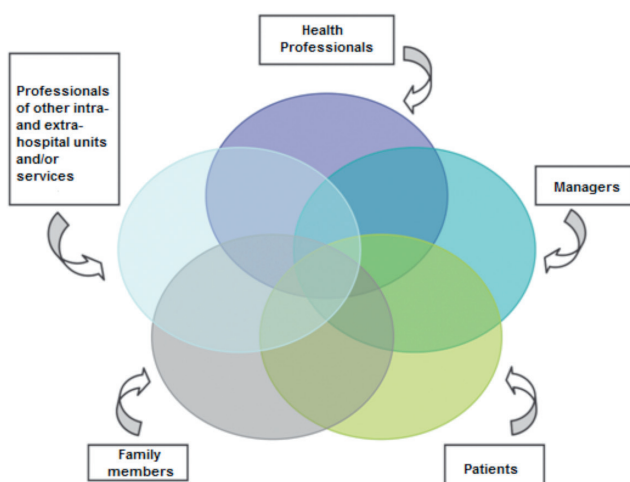


Figure 2. The relationships and interaction in the ICU care environment

Due to the fact that it is a restricted environment equipped with high technology, the ICU of itself alone fosters relationships and interactions between professionals, as well as the possibility of teamwork. It was also shown that professionals normally opt for and prefer to work in this environment because of the possibility of continual learning, because they like the work, because of the intense and deep professional relationships, even when accompanied by conflicts, and also because they come into little contact with the patient's family members.

DISCUSSION

In the support network in Adult ICU care, constructed on the basis of this study, understood as a set of connections, or a set of interconnected elements⁽⁷⁾ necessary for the care of critically ill patients, in which constant and unique exchanges occur, the convergence of the threads to form the "knot" of care alone is not sufficient, but it is necessary for the network or environment/system as a whole to be integrated and receive feedback through exchanges/ information,

which involves the different actors, processes, services and sectors related to the care and recovery of patients.

For the Ministry of Health it is necessary to care for patients in a critical or potentially critical condition, guided by a systemic perspective of health care, including not only the ICUs, but other units, services and hospitals as well, which share this responsibility with the ICUs, both in hospital institutions and in other health units and services for the care of patients in a critical condition, whether or not they present different levels of complexity or specialization⁽⁸⁾.

Therefore, the ICU environment, conceived as being of "High Complexity", because of involving a set of procedures with high technology, costs, processes and highly qualified human resources⁽⁹⁾, is essentially characterized by the intensity of the relationships and inter-human and professional relations. This complexity, in the understanding of professionals, may be integrated to the extent that the team members interact with one another, approve of and stimulate each other mutually. Nevertheless, this concerns a location that needs to be continually (re) organized and receive feedback from interactions both within and outside of the ICU environment.

Promotion of interactive and full care needs to go beyond the technical-administrative dimension of the ICU environment, and think of the articulation of the different professional functionalities, articulation of distinct institutional and operational systems, and above all, of the variety of relationships and interaction that configure the phenomenon of care in its complex unit. It also means accepting the contradictions that exist and need to be confronted and overcome, without necessarily reducing them^(10,11).

To promote an environment of care, with the essence of the human being as a unique and complex being, according to Erdmann et al.⁽¹²⁾, involves the capacity of the professional to understand this being as singular, independent, different and sociable, and only thus, will the professional be enlarging his/her field of vision and making sense of the interactions that may be so much more intense, the greater his/her capacity is to differentiate and potentiate the inter-subjective possibilities.

In this context, it is not sufficient for only the family members to interact among them in the ICU waiting room before, during and after visiting hours, and the professionals relating and interacting well with one another within the ICU environment. It is essential for these interactions to be broadened, involving all the actors that compose this environment, in an integrated manner. For Morin⁽²⁾ This requires multidimensional thinking, by means of which each one of the actors plays an important role, but they must not be separated, and they must also not become non communicative among themselves.

Therefore, transmitting information to family members or passing on the daily medical bulletin to them, does not

necessarily mean that interactions occur between the professionals and family members, because the daily medical bulletin forms part of the formal routine of the unit; that is to say, forms part of the medical professionals' work. From this focus, it is necessary to gradually rethink the systematization of care, in the sense of flexibilizing the rules and routines.

The ICU care environment, based on a systemic view, involves not only formal or linear/timely relations among professionals, family members and patients, but also informal relationships. Therefore, this requires the approximation of professionals, patients and family members, not only in the technical sense, but also in the sense of interaction and not trying to escape from the and avoid contact and involvement with them, because when fleeing from family members, the professionals will be fleeing from the care itself of the patient in the ICU environment.

A study conducted with 15 nursing assistants in an Adult Neurological ICU in a hospital in the city of São Paulo/SP, in 2001, it was found that the majority; that is eight nursing assistants preferred to care for patients that did not communicate verbally, whereas four preferred to care for those who did communicate verbally, and for three nursing assistants it made no difference whether or not the patient was able to speak⁽¹³⁾. To the authors, the nursing assistants who reported that they preferred to care for patients who did not speak, justified their response, alleging that they were not in conditions to provide psychological support to conscious patients, due to lack of time and preparation for this, and also because they considered it easier to care for the physiological dimension.

Direct and intensive care in the ICU environment really demands a great deal of the professionals' time, especially, of the nursing professionals', who remained involved in the direct and intensive care of patients for a longer time, and who remained closer to the bedside of these patients, when compared with the other ICU professionals. In addition to the lack of preparation to provide psychological support to conscious patients, this statement reflects the difficulty shown by professionals in dealing with situations bordering on life and death, suffering and terminality, which points out the need for improving the training/qualification of these professionals.

In another study conducted with 12 visitors of patients hospitalized in the ICU of a university hospital in Rio de Janeiro, the authors recommended to ICU nursing teams to favor new models of care that exceed purely technical and fragmented care, in which the visitors to patients, in addition to being considered a component part of the ICU care environment, are also treated as clients⁽¹⁴⁾. These authors also recommended that the clients should be treated and cared for in a humanized manner, by the adoption of an efficient communication system, and encouraging the creation of

spaces such as the waiting room, to promote meetings between the nursing team and the visitors. They also suggested the organization of groups of reflection with the nursing team, in order to train them to take more humanized care of the visitors.

According to Morin⁽²⁾, the expectation of an improvement in human relations between persons and with themselves requires civilization of the human mind itself, and an advance in the direction of complex/systemic thought, understood as being a multidimensional thought. This however, depends on each human being, and in the ICU, especially of professionals in accepting this change and striving for this to happen, as well as the skill and capacity of potentiating the multiple relations and interactions that are processed in a dynamic continuous, circular and systemic manner.

In this field of discussion, the systemic view leads to thinking and doing, not to the evidences and the certainties, but in a global direction, to the uncertainty, unknown and random. Therefore, when appealing to the systemic approach when faced with the understanding of the significance of the care environments in the ICU, one considers that there is no key to or ready recipe for the universe of the complexity of care. But there are different pathways and roads capable of spanning the multiplicity of interactions and systemic associations⁽¹⁰⁾.

Finally, it is considered that the questions and discussions raised in this study need to be continued in further studies and must form part of the academic and care environments, both in the ICU and in other health care environments, and in the universities. This must be done so that it will be possible to advance in the systemic understanding of health and improvement in relationships and interpersonal and inter-professional interactions. It would also make it feasible in the practice of humanization of the ICU environments, especially, with respect to the interaction with the families and friends of patients hospitalized in these environments.

FINAL CONSIDERATIONS

The present study made it possible to conduct a discussion based on the inter-personal and professional relationships and interactions in the ICU care environment, in the light of systemic/complex thinking.

Therefore, based on systemic/complex thought, everything could be possible and likely in a new organization. Therefore, understanding the ICU care environment means embracing the circularity and dynamism of order-disorder-organization that continuously provides feedback to human and professional relationships and interactions. It also means understanding the human being as a complex entity capable of continually self-organizing himself/herself irrespective of conditions

and/or space/environment in which he/she finds himself/herself. In addition it means dealing and living with order and disorder, negotiating with uncertainties, dialoguing with contradictions and adversities, and enabling strategies capable of installing a new organization by potentiating the “sustenance of life”.

According to the interviewees, in the ICU, in the majority of cases, technical and routine care continues to prevail. Thus, it shows that the complexity of the ICU environment is reduced to high technology, with the purpose of satisfying the biological needs of patients. Therefore, how is it possible to speak of humanized environments, when the references still continue to be reductionist and simplified, and how can one center on a singular plan of care, when this is still learned in a fragmented manner, and sometimes, the human being is still conceived as though it were an object that receives care passively.

In this context, thinking of an ICU environment suitable for full and humanized care of the patient, which comprises differentiated technologies and professional and humanly qualified technicians, implies apprehending the complexity in its different dimensions, aspects, events and movements that compose the care in ICU. Nevertheless, this complexity needs to transcend the model of care with a biologicistic, linear, timely, and fragmented approach, in which the human being is seen in fragmented parts.

In order to serve the multiple dimensions and aspects of caring for the human being, it has become necessary to use new references, capable of involving the complexity and integrality of care in the complex and dynamic ICU environment. Therefore, it is necessary to develop a broadened view of the set of elements that compose this environment, based on a new systemic and global vision.

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