

# Nursing work in the intensive care unit and its interface with care systematization

*Trabalho de enfermagem em unidade de terapia intensiva e sua interface com a sistematização da assistência*

*Trabajo de enfermería en una unidad de cuidados intensivos y su interface con la sistematización del cuidado*

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## ABSTRACT

**Objective:** To understand the experiences of nurses in an adult intensive care unit in the development of Nursing Care Systematization (NCS). **Methods:** Qualitative research, participant study, using the Research Itinerary of Paulo Freire, with nine nurses in an adult intensive care unit of a hospital in southern Brazil. For collection and analysis of data were used Culture Circles, following the steps of investigation of generation themes, encoding and decoding, and critical revelation. **Results:** Nurses noticed they have limited knowledge about the patient's clinical and NCS, they still valued the development of technical procedures and manipulation of the technological devices because they feel recognized by the health team. **Conclusion:** As a possibility to change, the nurses were organized to start discussion groups on clinical cases and NCS, seeing strengthening knowledge and appreciation in front of the health team.

**Keywords:** Nursing; Intensive Care; Nursing Care; Nursing Process.

## RESUMO

**Objetivo:** Compreender as vivências de enfermeiros de uma unidade terapia intensiva adulto no desenvolvimento da Sistematização da Assistência de Enfermagem (SAE). **Métodos:** Pesquisa qualitativa, do tipo participante, que utilizou o Itinerário de Pesquisa de Paulo Freire, com nove enfermeiros de uma unidade de terapia intensiva adulto de um hospital do Sul do Brasil. Para coleta e análise dos dados foram realizados três Círculos de Cultura, seguindo as etapas de investigação dos temas geradores, codificação e decodificação, e desvelamento crítico. **Resultados:** Os enfermeiros reconheceram que possuíam conhecimento limitado acerca da clínica do paciente e da SAE, ainda valorizavam o desenvolvimento de procedimentos técnicos, manipulação do aparato tecnológico, por se sentirem reconhecidos pela equipe de saúde. **Conclusão:** Como possibilidade de mudança, os enfermeiros se organizaram para iniciar grupos de discussões sobre casos clínicos e SAE, vislumbrando fortalecimento do conhecimento e valorização frente à equipe de saúde.

**Palavras-chave:** Enfermagem; Terapia Intensiva; Cuidados de Enfermagem; Processos de Enfermagem.

## RESUMEN

**Objetivo:** Comprender las vivencias de enfermeras en una unidad de cuidados intensivos de adultos en el desarrollo de la Sistematización de la Asistencia de Enfermería (SAE). **Métodos:** Investigación cualitativa, tipo participante, que utilizó Itinerario de Investigación de Paulo Freire, con nueve enfermeras en una unidad de cuidados intensivos de adultos de un hospital del Sur de Brasil. Para la recolección y análisis de datos, se realizaron Círculos de Cultura, por medio de la investigación de generación de temas, la codificación, decodificación y descubrimiento crítico. **Resultados:** Enfermeras reconocen que tienen conocimiento limitado sobre la clínica del paciente y SAE, todavía valoran el desarrollo de procedimientos técnicos y la manipulación del aparato tecnológico, por sentirse reconocidas por el equipo de salud. **Conclusión:** Como posibilidad de cambiar la realidad, las enfermeras se organizaron para empezar grupos de discusión sobre casos clínicos y SAE, viendo fortalecer el conocimiento frente al equipo de salud.

**Palabras-clave:** Enfermería; Cuidados Intensivos; Atención de Enfermería; Procesos de Enfermería.

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## INTRODUCTION

Nursing work in the Intensive Care Unit (ICU) is complex and contains numerous requirements for the development of care. The dynamic between the professionals, the critical condition of the patients and the use of different technologies require from nursing knowledge of several sources, strengthening the assistance and maximizing effective work processes and care.

ICU is the complex level of the hierarchy of hospital services, showing the need for organization and structuring of nursing care in order to contribute positively to the quality of the actions and safety of the patient and the multidisciplinary team<sup>1</sup>.

In this context, the Nursing Care Systematization (NCS) is a solid conceptual structure that promotes continuity of care and quality of nursing care. NCS is a set of activities that aims to professionalize patient care through working tools to assist in decision making for execution of scientific, holistic and constant care. The Nursing Process (NP) is a method of work required as an important part for performing NCS<sup>2</sup>.

The Resolution of the Federal Council of Nursing (CO-FEN) number 358/2009<sup>3</sup>, dealing with the Systematization of Nursing Care and its implementation, defined that the NP should be divided into five steps: Nursing history, Nursing diagnosis, Nursing planning, Implementation and Evaluation of nursing. These interrelated and not sequential steps, helps in the organization of nursing actions, since they will generate records and possibilities of continuous monitoring by all professional about the signs and symptoms of the patient, its evolution and prognosis.

The organization and the use of NCS require several knowledge of professionals who develop it. The responsibility for this knowledge should be shared among the nursing staff and the institution, together with the permanent education processes in service<sup>4</sup>.

However, despite the legal requirement and with many possibilities of benefits through NCS, there is great difficulty in the routine of nursing professionals in developing it, such as the reduced number of professionals; excessive time spent on the records, role conflicts between the assistance and bureaucratic activities of nurses, little support from the institution; the superficial approach that is given to the subject during graduation, among others<sup>5</sup>.

Given the above, the objective of this study was to understand the experiences of a group of nurses from one adult intensive care unit in the development of Systematization of Nursing Care. This understanding is necessary because it contributes to other nurses can envision different possibilities of systematization, adding quality to the care practice and strengthening the profession.

## METHOD

This is a qualitative study, participant research type, developed by the Research Itinerary of Paulo Freire. The Itinerary Research was presented as a methodological potential for this study by predicting a dialogical relationship between those involved, researcher and research subjects, revealing "the social reality, which is hidden, allowing that the reflections of the participants lead them to new proposals for action on everyday health promotion"<sup>6,3554</sup>.

This research was developed in an adult ICU of a reference hospital in southern Brazil with 20 hospitalization beds. As study subjects there were nurses working in this ICU. As inclusion criteria were: to have a degree in nursing, nurses belong to the nursing team of this ICU without restriction to time of graduation or acting in health care or in intensive care. Exclusion criteria was: to be fulfilling the period of admission experience.

At the time of data collection, the unit had nine nurses in the range of professional and there was no nurse in times of admission experience. The nine nurses of the unit were invited and agreed to participate voluntarily in the study because they met the inclusion and exclusion criteria. Thus, the collection of data from this study included the participation of nine nurses.

Data collection was developed through the Culture Circle, which is a construction of Paulo Freire for implementation of the Itinerary Research. The Culture Circle is a place where gather all the participants, with the main element dialogue as a motivator of action and reflection on existential situations, addressing important issues of their everyday lives<sup>7</sup>.

The Culture Circle includes the steps of: Investigation of generator themes, Coding and Decoding and Critical Unveiling. In the research on the generator themes, the reflection process about a situation are developed and the determination words or terms raised by participants representing the problem situation<sup>6,7</sup>.

Then, there are the Coding and Decoding, seeking to understand the meaning of generator themes for the group of participants as well as the expansion of knowledge about them to awareness. The Critical Unveiling is the preliminary analysis of the extracted content, including interpretive subjectivity, building new possibilities for the transformation of reality<sup>6</sup>.

The entry in the field of the researcher and the recruitment of participants were at the monthly meeting of the unit's nurses when the objectives and the research method were presented, scheduling the date for the first Culture Circle. Three Culture Circles were developed with participants from November 2011 to January 2012, lasting approximately ninety minutes each.

In the first Culture Circle, there was the action of the nurses to participate in this research and, as a result, nurses signed the Consent Term (TCLE) and they authorized the audio recording of the meetings.

At that point, the participants were encouraged through questions to reflect on the reality experienced by conducting a survey of the generator themes, summarized as follows by the group: the ICU nurse has little experience care in the intensive care area, limiting the development of NCS; and the ICU nurse is identified a lot with the issues seen as techniques.

In the second Culture Circle, there was the coding and decoding of generator themes identified at first. The data synthesized of the first meeting were presented to the group through posters to stimulate reflection on the generator themes, identifying the possible causes of each situation and limit the impact on care practice. Participants also brought new information, laws and scientific literature, important for analysis of the generator themes.

At this meeting, participants were asked to describe in a panel the activities performed during the working day and, at that moment, they began to see more clearly the impact that the defined generator themes previously caused in their daily activities.

When performing the description of experienced aspects, participants began a process of awareness, with a critical view at the aspects considered limiting for the development of NCS.

The third Culture Circle happened as soon as participants resumed the path taken in previous meetings and, from awareness and analysis of the highlighted points on the reality began to emerge change opportunities.

Dialoguing about the generator themes, participants critically were able to divide responsibilities and propose actions for the transformation of reality. In this dialogical and reflective process was possible to reveal the main limitations and perspectives of nurses in relation to the NCS.

The qualitative data analysis occurred simultaneously to the collection with the participation of all subjects through the close reading of the compiled and systematized material, in the form of tables, from the construction in each Culture Circle, reflection and interpretation of highlighted topics, and collectively established goals to change a reality. Later, the researcher developed the final process of analysis with the theoretical discussion and dialogue with other authors that address these themes.

This study was submitted to the Ethics Committee in Research with Human Beings (CEPSH) of UFSC, observing the Resolution criteria of the National Council of Health, number 196 of 1996<sup>8</sup>. The identity of the participants was protected by the use of pseudonyms. It is important to mention that during 2011 the Institutional Review Board stopped attending for a few months, because of work government strike. Therefore, the research project was analyzed before the strike, pending the authorization of the service that would be held data collection because the document was without the seal of the institution. By decision of the Committee of the Graduate Nursing Program of the university,

bureaucratic projects were allowed to perform the data collection in order to maintain the deadlines for the defense of theses and dissertations, approved in CEPESH/UFSC, case number 2459 FR 439609 on April 9, 2012.

## RESULTS AND DISCUSSION

Out of nine study participants, 67% were male and 33% female. This finding contradicts most workplaces, where usually prevails female gender, by the nursing profession characteristics and the professional category of nursing, which is exercised predominantly by women, even today suffering the context of reflections history of the profession<sup>9</sup>.

Regarding the age of the participants, it is emphasized that people were predominantly from 25 to 30 years old (67%), 22% were 31 to 35 years old, and 11% were younger than 25 years old. This data is directly related to the training time, where it was found that 44% of working professionals had graduated in 1 and 2 years. The same percentage of 44% were of professionals with 5 or 6 years of training, and 11% of participants had education higher than 10 years.

These characteristics of the study participants were relevant to the group still at the beginning of the discussions because they were considered as a limiter for the development of NCS, since the little experience in intensive care often hinders decision-making, for lack of practical knowledge. Figure 1 shows the data on this generator theme.

**Figure 1.** First generative theme. Adult Intensive Care Unit, Florianópolis (SC), 2011-2012.

Adult Intensive Care Unit	
<b>Generator Theme:</b> the ICU nurse has poor experience in intensive care limiting SAE development.	
<b>Coding</b> - most nurses have few time acting in ICU; - fear of acting in ICU; - understanding that ICU nurses should be the ones who were highlighted in another sector with patients with lower clinical severity;	<b>Decoding</b> The lack of experience of healthcare professional working in intensive care hinders the development of the work. The fear in situations that require quick decisions in situations often unknown, makes the professional insecure.
<b>Critical unveiling of reality.</b> - When a professional development program is hired, it is important regardless of experience they have, however, the inexperienced nurse should always go through a long process of adaptation to act more safely and preferably he has worked in other units with lower care complexity for later to work in intensive care.	

The total or partial implementation of NCS has no representation in a large portion of health institutions in Brazil, not only by the numerous difficulties by health institutions such as the small number of professionals but also by the lack of professional attention, paucity of knowledge about NCS or even clinical, lack of workforce, acceptance of difficulties by other members of the multidisciplinary team, beyond a certain resistance to change<sup>10</sup>.

The nurses showed difficulties concerning their formation processes, because they do not have the knowledge, skills and competencies they deemed necessary for the action in intensive care. They reported to understand that acquiring part of this knowledge takes place in daily work, through daily activities.

Among the main factors that hinder the implementation of NCS, there are the lack of knowledge, especially those related to the step of physical examination, lack of offer of training by health institutions, inadequate records, role conflicts, lack of credibility with the nursing prescriptions (by the nursing staff and other professionals) and failure to establish organizational priorities<sup>10</sup>.

In the speeches of the nurses, the little experience in the area would eventually limit, including the ability to discussion with the multidisciplinary team, generating sometimes feelings of fear and insecurity in daily work. Such situations related to the insufficient knowledge hinder the development of activities such as NCS, since the group considered that its unsuitability to the reality or the use of such strategies with little property offer great risk of negative occupational exposure, creating gaps in the care process.

In that sense, the nurses immersed in their field and aware of their real need, require moments of dialogue and exchange of experiences as well as updating in the area. This insecurity should become a driving force of knowledge, implying the true commitment and transformation of health care, since without dialogue and exchange is impossible to have an authentic praxis<sup>7</sup>.

The responsibility for the situation, from the perspective of participants in this study, in part, on the selection criteria for admission to intensive care nurses who, sometimes, ignore the need for a specific profile, with professional experience in the area and training level of expertise<sup>2,10</sup>.

There are requirements for the careful evaluation capacity, as well as skills and competencies to carry out the nursing history, where the clinical reasoning must be present in all actions, from diagnosis of a phenomenon, the choice of interventions and evaluation of results<sup>2,10</sup>.

Another aspect highlighted by the participants was the experience of acting in intensive care without any previous contact in other hospital areas, whose ideas focused on the possibility of an enhanced adaptation if the development care units of different levels of complexity (average or low), before assuming their duties in the ICU.

As a possibility to change the local reality, participants gave suggestions about investment in professional development programs, where they would have opportunity to reflect, share experiences and possibly improve behaviors in the experienced situations. In addition, educational measures to educate nurses favor patient safety and allow improvements in nursing care provided<sup>11</sup>.

As the dialogue was developing, nurses reflected on the responsibility of everyone in the knowledge construction process, because during the academic education there is the development of general skills, a fact that makes it necessary to search for specific skills for acting areas as soon begins professional life.

During the exchange of experiences, the decision-making difficulty was identified as critical to all participants. They mentioned that identifying problems in everyday situations is a skill that the nurse develops more easily, but deciding on the necessary actions to resolve these situations requires a broad technical and scientific knowledge, and professional experience.

At that moment, NCS emerged as a possibility to minimize this limitation because it enables an organization of daily activities and favors the identification of resolving actions during the decision-making process.

With this statement, a research recently developed with nurses noted that there is propensity by them to strengthen situations in which decisions do not meet the care needs and admit guilt to try to articulate and meet institutional demands with those who consider essential for effective care<sup>12</sup>.

Being aware of the difficulty of decision-making process in NCS, the difficulty of valuing the nurse by the multidisciplinary team began to be discussed, stressing the fact that sometimes the nurse has difficulties in understanding and using their tools, negatively contributing to their professional image and appreciation by other professional staff.

In this way, the difficulties of professional inexperience or, specifically, to nursing care in critical care, are not only obstacles to the use of NCS, but also adversely affect the execution of other processes such as decision making or the articulation of knowledge to the nursing care and its relationship with the multidisciplinary team.

The daily routine of ICU has numerous technical issues, requiring specific and professional skills and competences. The nurse is responsible, together with the other members of the nursing staff, for most actions of continuous care to patients. This particular characteristic of the profession of performing multiple tasks (assistance, administrative and teaching of nursing staff) contributes to NCS to be understood as a bureaucratic process.

There is a strongly dichotomy between assistance and registration. This fact is decisive for the professional having difficulty understanding the systematization as a relevant strategy for care together with the practical/technical issues. Figure 2 shows the second generator theme that emerged in the debate of the participants: the ICU nurse is identified more with the issues seen as techniques.

On the day by day in ICU, nurses are faced constantly with the criticality of the health status of patients who are on the

**Figure 2.** Second generative theme. Adult Intensive Care Unit, Florianópolis (SC), 2011-2012.

Adult Intensive Care Unit	
<b>Generator:</b> the ICU nurse is identified a lot with technical issues.	
<b>Coding</b> - nurses enjoy working in the ICU for having a relationship with various equipment for care (monitor, ventilator); - nurses like the relationship with situations that depend on quick action to care for the patient (life risk situations);	<b>Decoding</b> Nurses like the relationship with patients in critical situations, it is the moment he feels most useful and valued. The amount of tasks and technical knowledge related to health care equipment cause a largest domain of the work place and generally improve the relationship with the other members of the multidisciplinary team. The need of this professional to perform technical activities makes him to have the perception that SAE is a separate activity of patient care, being understood as an administrative activity.
<b>Critical unveiling of reality.</b> SAE has to be understood as a medical work, no less important than the technical issues in the intensive care because it is giving support to decision making in the definition of care to be applied to the patient. The difficulty of the professional to develop a clinical reasoning and relating the situation experienced by the patient with the care to be provided makes the knowledge of techniques as more valued.	

threshold between life and death, requiring frequent development of highly complex technical procedures to maintain life patient who is under his care<sup>13</sup>.

Being a unit of the hospital that requires professional agility to take decisions and implement actions, there was a perception of the group that practical activities are the most relevant, refraining from performing NCS as well as care planning that it will be developed, often failing to support science-based actions and care that developed and those that could also be developed and generate better and bigger impact on the health of assisted patient.

The electronics devices domain and technology used in the patient's recovery process were also factors cited by the group as something that motivated them in relation to other care areas. This point also contributed to the perception that perform activities understood as technical activities more important even from the planning of care.

The technical view deviates the professional from reality, focusing only on the biological and technical aspects of health care. Therefore, the care provided by health professionals are often developed mechanically, guided by tasks, rigidly following rules and regulations. Reflection on these actions to overcome the practice centered on technical ability is essential, and this becomes possible in the encounter with the other, where actions are recognized and humanized, generating the process of action and reflection and enhancing opportunities to acquire new knowledge<sup>7</sup>.

It is noteworthy that many times nursing care in intensive care goes by traversing the triad: technique, technology and humanization, since all these aspects are essential and in many vital moments to keep the basic needs of the patient<sup>13</sup>. Thus, this area should not be considered less human than others that require less technological equipment and technical procedures, but should be understood in its uniqueness, deepening reflection on direct patient care and care provided by technological resources<sup>14,15</sup>.

The nurse in ICU has several functions, as the clinical and functional coordination unit, education in the nursing team and focused on the patient and his family. It is noteworthy the function of linking the various professionals involved in the care of patients and also articulate information about them, involving in this process the administrative areas of the hospital who care about the hospital bills and the financial purposes of the institution<sup>16</sup>.

Among the functions that are more often developed by nurses, spending more time at work, there are supervision, coordination and technical specialized care<sup>16</sup>, according to the feelings mentioned by participants in this study to feel more valued and recognized by the other members team when they perform functions and activities that demonstrate their mastery of the general operation of the unit and care, as well as on the procedures for complex and specialized techniques, including the field of technology involved.

During the dialogue process of members of the Culture Circle, one of the participants wondered what others understood by bureaucratic and technical assistance activity. The reflection generated consensus among the participants that the bureaucratic and administrative activities encompass those considered relevant functions to the team's control and information in patient's records. The not documentation of this process was critical during the dialogue of the group, because the lack of care records was termed as something that compromises the realization of nursing care.

At that point, it was suggested to resume NCS concept seen the reading and analysis of Resolution of COFEN 358/2009<sup>3</sup>, which provides for the registration of all care activities. From this moment, the dialogue was the consensus that the record of the performed activities is the end of the patient care process and is part of the assistance, unlike the initial consensus, when they considered records as something bureaucratic and detached from practice.

Therefore, there was group's awareness that the implementation of NCS comprises the start and the end of all assistance activities performed by nurses, with each step representing different times, but interconnected. NCS was then understood as an activity that should be part of the daily work of nurses for the care of planning to be done with quality, helping in the decision-making process on a scientific basis.

In this way, NCS offers a holistic care to the individual and family, and enable greater resoluteness during nursing care, making it difficult not considering it as care practice<sup>5</sup>. With regard to the care management practices, all care activities, administration and education, although they are part of bureaucratic activities, contribute and play a fundamental role for the quality of care provided by all health team, especially the nursing staff<sup>17</sup>.

During the Culture Circles, it was clear that nurses reached the awareness of the importance of this work methodology



and identified their limitations, as long as they reported a lack of professional experience, the feeling of devaluation of the nurse, the perception that NCS is a legal obligation and that the issues seen as techniques have major relevance in the intensive care unit.

After moments of reflection among participants, it was possible that the group define new perspectives with the change of objective reality, directing their actions in pursuit of the implementation of NCS, aiming to work the development of the factors that are intended to limit or hinder to its effectiveness. From the moment that the participants of Culture Circle were perceived as unfinished beings and permanent process of construction, they found the possibility of continuing education development, and the expression of education makes possible the transformation of the individual<sup>18</sup>.

As knowledge about the patient's clinical and little work experience, there were two important factors in this process, the team decided to start a study group to discuss clinical cases and to start the discussion about these cases and the application of NCS by starting the collective construction between the groups of nurses.

This initiative will contribute to the development of scientific knowledge-based practices that, added to the building process and recognition of the nurse's role, influence to implement NCS in this ICU, providing a more qualified and safe care to patients and the entire team of health.

## CONCLUSIONS

This study showed that NCS was not developed with ease and fullness by nurses working in the studied institution, as recommended by COFEN ten years ago. It was perceived difficulty of nurses with their professional practice, once the participants reported that the technical and scientific improvement would be needed, recognizing the responsibility of each professional, which is essential for the development of NCS.

The group also highlighted there are several factors that influence the decision to apply or not NCS, and showed the pursuit of expertise and tools for operationalization of NCS that will be the basis for the implementation of this activity into their routine.

Among the weaknesses identified in this study, the group emphasized the limited knowledge about NCS and understood they have a responsibility with the health institution for it to happen. The lack of work experience was understood as a limitation, but it became clear to the participants that the constant search for professional updates is needed and that they can come from the group.

NCS was understood in group consensus as a method of work which contributes greatly to the planning and organization

of care activities, with the understanding that should be constant analysis of the work process in search of consistent improvements with the current scenario of the institution.

As a possibility for a change in this scenario, the perspective of implementing a study group composed of these nurses emerged, trying to establish the exchange of experience in search of the best professional practices, adding to the conquest of space by the multidisciplinary team.

Limitations of this study were related to the number of involved individuals who represent only the local reality. Due to the working range of professionals in ICU, it was necessary to limit the number and the time of development of Culture Circles.

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