Competencies in the education of Nursing Technicians to implement the Nursing Care Systematization

ABSTRACT
This is a qualitative, exploratory and descriptive study whose general objective was to learn, considering the perspective of the nursing technician who works in school hospitals, the competencies developed during their educational process to implement the Nursing Care Systematization (NCS). Data collection and analysis were carried out through a focal group, with content analysis and nursing technicians. Two thematic categories emerged: The participation of the nursing technician in the NCS and The competencies in the education of the nursing technician. Each one received two subcategories: Conception of the NCS and (De)valuation of the NCS, Technical-scientific competency and Competency in the interpersonal relationship, respectively. It was observed that the NCS must be shared, discussed and made public among nursing professionals, so that they may acknowledge themselves as the leading actors of their methodology and be aware that their practices determine the results.

KEY WORDS
Nursing process. Professional competence. Nurse’s role. Human resources formation. Interpersonal relations.

RESUMO
Trata-se de pesquisa qualitativa, exploratória e descritiva, com o objetivo geral de conhecer, considerando a perspectiva do técnico de enfermagem que atua em hospital universitário, as competências desenvolvidas durante sua formação para implementar a Sistematização da Assistência de Enfermagem (SAE). A coleta e análise das informações ocorreram por meio de grupo focal, com técnicos de enfermagem e da análise de conteúdo. Emergiram duas categorias temáticas: A participação do técnico de enfermagem na SAE e As competências na formação do técnico de enfermagem. Cada qual recebeu duas subcategorias: Concepción de la SAE y (Des) Valorización de la SAE, e Competência técnico-científica e Competência na relação interpessoal, respectivamente. Constatou-se que a SAE necessita ser compartilhada, discutida e divulgada entre os profissionais de enfermagem, para que eles se reconheçam protagonistas de sua metodologia e tomem ciência de que suas práticas determinam os resultados.

KEY WORDS

DESCRIBUTORES

RESUMEN
Se trata de una investigación cualitativa, exploratoria y descriptiva, con el objetivo general de conocer, considerando la perspectiva de técnicos de enfermería que actúan en un hospital universitario, las competencias desarrolladas en su formación para implementar la Sistematización de la Atención de Enfermería (SAE). La recolección y análisis de los datos se efectuó a través de grupo focal con técnicos de enfermería y análisis de contenido. Surgieron dos categorías temáticas, La participación del técnico de Enfermería en la SAE y Las competencias en la formación del Técnico de Enfermería, cada una de ellas con dos subcategorías, Concepción de la SAE y (Des) Valorización de la SAE, Competencia técnico-científica y Competencia en la relación interpersonal, respectivamente. Se constató que la SAE necesita ser compartida, discutida y divulgada entre los profesionales de la Enfermería para que los mismos perciban que son los protagonistas de la metodología y que sus prácticas determinan resultados.

DESCRIBUTORES
INTRODUCTION

Nursing Care Systematization (SAE) is a methodology of the work under nurses’ responsibility that has several names depending on the reference adopted, on the purpose and area it is intended. The most contemporarily used expressions are: Care Methodology, but Care Systematization can also be found. However, other names are also mentioned: Nursing Process (PE), Caring Process, Care Methodology, Nursing Care and Consultation Process. The plurality of expressions to designate the methodology may have collaborated to make the dissemination and appropriation of this scientific method difficult in the nursing work processes(6-8). In this study PE and SAE were used as synonyms, the denominations used by the authors being respected.

The Nursing Process (PE) consists of a methodological instrument that enables organizing the work and helps professionals develop care with individual and resolutive qualities, provided that it is supported by conceptual models or nursing theories adequate to each care situation(9).

The PE methodology, more recently called SAE, has been used in Hospital de Clínicas de Porto Alegre (HC) since the 70’s. It is used by nurses, nursing technicians and auxiliaries and it is founded in the Basic Human Needs theory(4-5).

The SAE’s proposal gives visibility to the nursing team’s actions, in addition to promoting full care to patients. As to its implementation, all team members are apt to participate according to their professional competence. A study on the nurses’ experiences in a teaching hospital in the process of implementing nursing diagnoses, which is one of the SAE’s phases, verified, and it came as a surprise to the authors, that nursing technicians were unsatisfied because they did not effectively participate in the care provided(6).

As to legal aspects, nurses are responsible for implementing, planning, organizing, carrying out and assessing. Nursing technicians, on their turn, have as attribution to participate in the nursing care program(7-8). Despite this legal support, in the practice of providing care, nursing technicians seem to have a limited collaboration in its implementation, their involvement with the SAE being usually limited to the nursing cares prescribed. Under this point of view, this professional category does not broaden nurses’ view when they are planning actions because they do not participate in the discussion process. Additionally, under some circumstances, nursing technicians show little knowledge of the methodology.

One of the properties of the nursing process is exactly interactivity, once it is based on reciprocal relations in the nursing team, in the multi-professional team, with patients and families(1-3). In this sense, it is important to stimulate nursing technicians to contribute and participate when care actions are planned once they observe and assess daily alterations in patients.

THE COMPETENCE MODEL

In professional education, nursing technicians’ qualification has undergone transformations as to new conceptions concretized through the Brazilian Curricular Guidelines (DCN) for Professional Education. The DCN started to set the competence model as a guiding conception, which tries to provide future healthcare providers with several capacities (initiative, thinking, critical thinking and entrepreneurship, among others) allowing them to transit and meet their professional demands by building their professional itinerary(9).

The notion of competence started to be used in Europe in the 80’s. It came up in the middle of a crisis of the Taylorist-Fordist organization model and of the economic globalization. Qualifying workers is no longer oriented towards carrying out certain tasks of a position, and it is understood as a set of skills, competences and knowledge originated at different levels: general knowledge (scientific knowledge), professional qualification (technical knowledge) and work and social experience (tacit qualification)(10).

When the competence model is expanded to the qualification of nursing technicians, there is a search for analyzing, valuating and integrating knowledge in all of its dimensions. Therefore, the competence model brings forth a new approach when it values workers’ tacit knowledge and subjectivity.

For this study the Perrenoud’s competence concept was mainly used, whose definition is capacity to act effectively in a certain type of situation based on knowledge, but not limited to it(11).

As to the qualification of the TE’s competences related to the SAE practice, developing several areas of knowledge is necessary to its implementation. Caring actions are inserted in a dynamic and complex context demanding from healthcare providers, in addition to the theoretical aspects of a competence, the mobilization of aspects pertinent to their relationship with patients, with the team and with the family. Thus, a TE who contributes with information and suggestions to nurses to plan caring actions broadens and strengthens the SAE’s requirements, collaborating with a more critical and reflexive team.

We highlight that the aspects related to TE qualification have been approached in this research by taking into account that professional competences are developed while the qualification process takes place, which starts in the...
technical training course and moves along the professional path involving practices that transform themselves and are consolidated in the daily work.

**OBJECTIVES**

The objective of this study was to learn the competences developed in qualification to implement the Nursing Assistance Systematization considering the perspectives of nursing technicians who work in a teaching hospital.

**METHOD**

This exploratory-descriptive qualitative research was done in Hospital de Clínicas of Porto Alegre. Seven female nursing technicians participated in the study, two who worked in a specific area of the HC, while five others in another area. The inclusion criteria were: nursing technicians who provided direct care to patients, had worked for at least one year in that institution and who were not undergoing a dismissal process. Data were collected through a focus group. This technique’s objective is to gather information by deepening the interaction among participants in order to generate consensus or to make divergences explicit\(^{(12)}\). The information obtained in the focus group were transcribed and submitted to a theme-type content analysis method\(^{(13)}\). To ease organizing and analyzing the information, the Qualitative Research Nvivo 2.0 software was used (QSR).

The research project was approved by the Committee of Ethics in Research of the HC (project: 07-203). To protect their anonymity, the research participants are quoted using the letter S, which stands for subject and they are numbered chronologically S1, S2, S3, S4, S5, S6 and S7 and the meetings of the focus group were numbered E1, E2 e E3, which stand for the first, second and third meeting, respectively.

**RESULTS AND DISCUSSION**

The categories defined after the analysis of the focus group are presented in the next table:

<table>
<thead>
<tr>
<th>Categories</th>
<th>Theme Subcategories</th>
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</thead>
<tbody>
<tr>
<td>The participation of nursing technicians in the SAE</td>
<td>Conception of the SAE (De) Valuation of the SAE</td>
</tr>
<tr>
<td>The Competences in the qualification of nursing technicians in the SAE</td>
<td>Technical-scientific competence Competence in interpersonal relations</td>
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</table>

Under the perspective of nursing techniques, to participate in the SAE one has to understand and value of this methodology in the work processes. The analysis of the information suggests that participation of nursing technicians is still limited once there are gaps in their initial qualification and during their professional life related to the conception of the SAE, thus making their understanding and valuation difficult.

**Conception of the SAE**

Some subjects understand that the SAE is bound to the nursing prescription, which is equivalent to nursing care. Similarly, it is a guide and it is the deeds manifested in the care routines. The other phases of the methodology were not stated clearly.

Those are the procedures dictated in the computer, after that you print it, we have the nursing prescription written by the nurse. I know that. Right? (S1E1).

I think that it is what we are going to do is what has been prescribed (S2E1).

I think that it includes everything you will have to provide to the patient, in addition to the prescriptions, things that compose our daily routine in the care provided to patients. I think that it includes everything, even the nurse’s prescription (S3E1).

What we do is spontaneous, you don't need any prescription (S2E1).

This discussion shows that the definition of SAE is partially understood by participants. Some of them highlight the nursing prescription once it represents the SAE. On the other hand, S3 shows a differentiated view when she refers to the SAE not exclusively as the nursing prescription, but as everything that one provides patients in the care routine. The conception that equals the SAE to the nursing prescription diminishes nursing technicians in their care-proving actions because based on this perspective, the other SAE’s phases are not acknowledged and valued, making intervention impossible.

**(De)Valuation of the SAE**

The valuation of the SAE is an important factor that impacts on its implementation and essentially involves the nursing team. In this sense, participation of nursing technicians is understood through the interventions they make based on the prescriptions, when then they follow a certain logic, setting priorities and meeting patients’ needs. For some research subjects, nursing prescription is often interpreted merely as a routine indifferently applicable. This situation appears in the reports about prescription of care actions inadequate to the patient’s reality.

[...] It is a routine, it is something almost identical for everyone (S3E1).
The prescriptions for the patients are almost the same, except for some who are worse. Then, something should be changed in the prescription (SSE1).

Suddenly a patient is admitted is something and, later, after some time, he may have an operation. Then, the nurse should pay attention to these changes because it is useless to provide care, check vital signs, bathe them and within one or two days he has another operation and comes back with a drain and other things. Then, the prescription has to be changed, one has to pay attention to these changes in prescriptions so that they are updated for us. The patient comes from the ICU, he can't do anything, can't stand up, has no balance, in our case sometimes even a little leg is missing. This part should be more updated (S2E1).

S2 stresses that care cannot fully meet patients' needs because it is not articulated with the actions planned. Nursing prescriptions that do not distinguish the patients' conditions make technicians' work difficult once they prescribe actions that are far away from the patients' reality.

Two subjects have different opinions about nursing prescriptions that are justifiable due to the number of patients who are admitted in their sector. In those speeches we can see the positive influence of nurses as agents who value their actions and interact with their team. Within this context, work relations seem to be more balanced and constructive. S1 verbalizes her confidence in solving conflicts and shows that there is a partnership with the nurse.

Our prescription is more updated, yes (S6E1).

I think that it happens even because of the number of patients. They (nurses) do physical exams even during the night. If something has to be changed, they go there and change it. Our prescriptions are very updated. There are, for sure, many repeated items. Sometimes you find genitals to be washed three, four times; procedures related to catheters at the top, in the middle and at the end a prescription. There are many things repeated, but prescriptions are very complete and are checked daily. We work with the chief nurse, then, even because the number of patients is lower and the number of nurses, higher (S1E1).

The work is more directed (S6E1).

S1’s speech shows an organization method of the nursing teamwork, primary nursing\textsuperscript{(14)}, which would explain the success and valuation of the SAE. In this methodology, a nurse, a chief nurse, is responsible for coordinating nursing the care to be provided to patients and their families, being a reference in the institution for following up the treatments prescribed. This method enables qualified nursing, with individualized, full and continuous care provided to patients in a humane and competent way. Participants’ discussion, similarly, exemplifies the acknowledgement of the chief nurse as an element guiding her team and broadens the visibility of her actions. Consequently, it favors the very implementation of the SAE.

Specifically related to nursing prescription, its projection results from care actions to meet the unique needs of individuals, which leads nursing professionals to realize that their practices unarguably determine results. Recovering the importance of the existing logic in the work processes may contribute to make the nursing team understand that they are the SAE’s protagonists. Thus, favorable comments make one feels stimulated and give reliability to a more integrated practice where exchanging experiences happens not only inside the nursing team, but also inside the multi-disciplinary team.

Technical-scientific competence

Technical-scientific competence related to implementing the SAE is understood as the control of theoretical and practical nursing knowledge required to meeting patients' needs. Theoretical knowledge includes the SAE’s approach and nursing care knowledge related to patients’ pathologies. Similarly, technical-scientific competence is composed of skills acquired during professional experience exemplified in knowing how to do. According to their reports, in the curricular matrix of schools for nursing technician qualification, the SAE was not approached and the emphasis of the learning was directed to nursing care, corroborating the findings of the study on the nursing process\textsuperscript{(15)}. In the discussion about learning the SAE, participants expressed a gap related to their initial qualification:

[... ] In the technical course I didn’t study that. In three years and a half in the technical course I never saw that (S7E2).

Neither did I. Because at that time it didn’t exist (SSE2).

Facing such a situation, participants tend to value knowledge of patients’ pathologies to subsidize their care actions and, thus, to contribute to provide nursing care.

[... ] first of all, she (nursing technician) should know patients’ diagnosis. [...] Often enough there is no time to get their chart and check their pathology (SSE2).

I think that one has to have technical knowledge so that, based on it, one is able to make suggestions. There are many procedures that are no longer used since we finished the course. They are different now. And if you don’t see that clearly, you cannot contribute with the nurse (S7E2).

I've worked in the ICU for eleven years, and you can do, calmly, all procedures [...] aspirate, help the doctor, but then you already have some knowledge, you've been in that area for a while already (SSE2).

When you work in the ICU, you have to read patients' charts to know what is happening to them. [...] (S7E2).

The speeches show that the doctor's diagnosis renders information deemed necessary to organize participants' work processes. The SAE is not mentioned in that same way, despite being a methodology that has relevant aspects related to patients. Nursing technicians, unaware of the resources offered by the methodology, identify themselves.
with the approach of the treatment of the disease and look for support in medical information. Initial qualification based on learning nursing care related to patients’ pathologies may have contributed to valuating this aspect, in addition to the practice with the nurses.

In addition to initial qualification, deemed a foundation for professional practice, participants realize and mention the importance of learning within their daily work to acquire competences. In the third meeting they expressed their ideas:

In the daily work you learn more and don’t forget. Always you learn something [...] I’m still learning, for sure. Everyday you learn something else (S4E3).

I think it is permanent. Even the techniques issue, back there in the technical course we attended, how much has changes about medical drugs, so much has changed. So, I think that a professional has to be open to those changes, to adapt to the reality because things will go on changing, evolving (S7E3).

These speeches clearly express that in the universe of nursing techniques updating knowledge is limited to some courses inside the community and in the institution where they work. Development opportunities in their professional career are limited. Discussion about work processes of the nursing and multi-disciplinary teams to make advancements were not mentioned. The focus of any updating is technical knowledge.

**Interpersonal relationship competence**

The interpersonal relationship competence was deemed another important concept to be implemented in the SAE. Participants mentioned both aspects related to patients and to the healthcare team and highlighted the interaction inside the nursing team interfering with the SAE practice. As they see it, teamwork stands for interpersonal relationship competences and includes elements such as leadership and communication. Building up this competence when qualifying nursing technicians eases interactions with the healthcare team and with patients, and it can result in care actions more able to solve problems. Under this perspective, for two participants implementing the SAE is determined by a team where there is interaction and where members’ suggestions are discussed and listened. S1 mentions her satisfaction in being part of a group where planning the care to be provided is discussed by care providers and teamwork actually happens. Similarly, S2 expressed herself by approving and strengthening those ideas.

Listen, I'm kind of uncomfortable saying this, but in my area we have the privilege of actively participating in any decision, in the records, in prescriptions. We talk about everything, we participate in everything, even because of the number of patients. [...] There, teamwork actually happens (S1E1).

We learn about all patients when the shift changes (S2E1).

On the other hand, the remaining nursing technicians describe difficulties in teamwork due to lack of articulation among care actions and difficulties in communication related to nursing prescription. Participants point out restrictions to its implementation because they see instructions that do not match the evolution in patients' needs. In their speeches below they describe these situations in their daily professional life.

Usually they (nurses) write the prescription when a patient is admitted and this prescription isn't changed till that patient leaves, with the same items. Then, it should be updated (S7E1).

When there isn't care to provide, do walk around? (Moderator).

Yes, we do(S3E1).

And even when you point out that there are modifications, isn't the prescription modified? (Moderator).

Next day it is there again (S3E1).

What happens is that sometimes you end up by not reading the nursing prescription. You know. Then, if there is an important item, you don't read it, because you are used to that repetition which is not actually focused on that patient, you just don't read it. You know what you have to do, so you go there and do it, automatically (S2E1).

Two studies on the nursing process and diagnosis corroborates participants’ perception. In those researches, the nursing team reports the need of reevaluating nursing prescriptions. The aspects raised, among others, are related to unnecessary and inadequate routines prescribed. Nurses question the need of prescribing routines because they allege that those should be internalized by nursing auxiliaries and technicians, and only priority care should be prescribed. As they see it, the methodology used in prescriptions makes nursing technicians fail to read them and they devaluate them. The problems mentioned evidence difficulties in communication, generating dissatisfaction at work(16-17).

Nursing technicians’ behavior shows, similarly, the ethical aspects pertinent to the interpersonal relationship competence. Participants do not argue about the difficulties caused by nursing prescriptions. When this situation is analyzed, we have to take into account that most of participants' reports disclose that there are few opportunities to discuss and reflect on their practices. The work, most of the times, happens in a fragmented way and, thus, participants’ position discloses the values of the nursing team. In this sense, ethical issues related to absence of practical commitment to transforming the models in force indicate the need of developing political competences(18).

In addition to communication, participants report situations where leadership appears as another important element to bring awareness of teamwork. Within this scenario, nurses are seen as leaders with many activities and who,
sometimes, have difficulties in meeting their team’s needs. As much as nursing teams, they have to develop their interpersonal relationship competence in order to keep interacting within their group. In the speeches below participants report how they try to clarify doubts related to their care actions.

At night we go straight to them (nurses). We just inform what is happening and they solve it. But I’ve already worked in the day shift, where it was easier and fast to go straight to the doctors (S6E1).

[...] in our unit, they (doctors) stay there the whole day so we can go straight to them. After that we inform the nurses: listen, this and that happened, I’ve already informed the doctor (S2E1).

Because sometimes they are busy too. They have other things to do and there are just two nurses (S5E1).

Based on the analysis of the discussions we can see that the SAE is inserted in the working processes of the nursing team. Aspects related to competences in interpersonal relationship - communication and leadership, mediated by ethics - influence its implementation. An interactive team is in a better situation to promoted healthcare actions articulated with the SAE. Therefore, the nursing team’s challenge is to develop, in their qualification, the different dimensions of the competences related to the SAE by considering them all important within the healthcare context.

Nurses, on their turn, take little advantage of that partnership and seem to be unaware of nursing technicians’ competences related to the exercise of the SAE, which makes it difficult supervising, guiding and evaluating the healthcare actions of their team. In those moments the possibility of carrying out practices unbound to a planning is created, which contradicts the SAE’s referential.

CONCLUSION

The analysis of the information suggests that nursing technicians’ participation is still limited once there are gaps in their initial qualification and during their professional path related to the SAE conception, thus making their understanding and valuation difficult. The SAE notion has been understood as the possession of theoretical and practical nursing knowledge required to meeting patients’ needs was deemed essential for healthcare practices, and in addition to the theoretical knowledge of the SAE, technique and knowing how to do things were highlighted. The interpersonal competence, understood as teamwork involving communication and leadership mediated by ethics was also deemed a differential to implement the SAE. During the sessions, part of the group realized that the teams that promote interaction among their components have efficient communication and leadership processes. The discussions highlighted, in this sense, the role of the nurses who have interpersonal competence in the healthcare actions. In the reports that showed articulated teams, the committed presence of that professional seems to be a differential for the implementation of the SAE. While the knowledge of the methodology remains restricted to nurses’ practices, it is unlikely that other categories inside a nursing team are able to contribute to their recognition and divulgation. As a suggestion, systematic discussions should be organized about the SAE among members of nursing teams including the competences that emerged in participants’ reports so that all members of a team could suggest improvements for their practice and could understand the impact of the methodology on their healthcare actions.

REFERENCES


