

The nurse work process in the center of material and sterilization*

O processo de trabalho da enfermeira na central de material e esterilização

El proceso de trabajo de la enfermera en el centro de material y esterilización

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ABSTRACT

Objective: To describe the perception of nursing groups about the elements of their working process at the Material and Sterilization Center (MSC). **Methods:** Descriptive, qualitative research with fifteen MSC nurses from health and teaching institutions from Curitiba – Paraná. Data were collected through a focal group and submitted to analysis of thematic contents. **Results:** The elements of the working process were defined in the perception of the focal group: the objects are the team and the processing of materials; the instruments were planning, interpersonal communication / relationships and knowledge; the aims are: guaranteeing the quality of the service and of the team, indirect care, and search, improvement and use of technologies. **Conclusion:** By noticing and reflecting the elements of her working process, the MSC nurse is able to understand her practice, develop actions compatible to her needs and qualify her know-how.

Keywords: Work; Nursing, team; Esterilization/ instrumentation; Materials, management, hospital/ organization & administration

RESUMO

Objetivo: Descrever a percepção grupal de enfermeiras acerca dos elementos do seu processo de trabalho na Central de Material e Esterilização (CME). **Métodos:** Pesquisa qualitativa, descritiva com quinze enfermeiras de CME de instituições de saúde e ensino de Curitiba – Paraná. Os dados foram coletados por meio de grupo focal e submetidos a análise de conteúdo temática. **Resultados:** Foram definidos os elementos do processo de trabalho na percepção do grupo focal: os objetos são a equipe e o processamento de materiais; os instrumentos foram planejamento, comunicação/ relacionamento interpessoal e conhecimento; as finalidades são garantir a qualidade do serviço e da equipe, cuidado indireto, e busca, aprimoramento e aplicação de tecnologias. **Conclusão:** Perceber e refletir os elementos do seu processo de trabalho permite a enfermeira da CME compreender a sua prática, desenvolver ações condizentes às suas necessidades e qualificar o seu saber-fazer.

Descritores: Trabalho; Equipe de enfermagem; Esterilização/ instrumentação; Administração de materiais de hospital/ organização e administração

RESUMEN

Objetivo: Describir la percepción grupal de enfermeras respecto a los elementos de su proceso de trabajo en el Centro de Material y Esterilización (CME). **Métodos:** Se trata de una investigación cualitativa, descriptiva realizada con quince enfermeras del CME de instituciones de salud y enseñanza de Curitiba – Paraná. Los datos fueron recolectados por medio de grupo focal y sometidos al análisis de contenido temático. **Resultados:** Fueron definidos los elementos del proceso de trabajo en la percepción del grupo focal: los objetos fueron el equipo y el procesamiento de materiales; los instrumentos la planificación, comunicación/ relación interpersonal y conocimiento; las finalidades son garantizar la calidad del servicio y del equipo, cuidado indirecto, y búsqueda, perfeccionamiento y aplicación de tecnologías. **Conclusión:** Percibir y reflexionar sobre los elementos de su proceso de trabajo permite a la enfermera del CME comprender su práctica, desarrollar acciones acorde a sus necesidades y calificar su saber-hacer.

Descriptorios: Trabajo; Grupo de enfermería; Esterilización/ instrumentación; Administración de materiales de hospital/ organización & administración

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INTRODUCTION

The working process of the nurse is theoretical-practical, interdependent and complimentary to healthcare, characterized by a set of elements (objects, instruments and purpose) adjusted to the particularities of the profession and, therefore, it shows itself in a unique and peculiar way⁽¹⁻²⁾.

The elements articulate themselves as the developed practices act on an object by means of instruments, which will bring outcomes to a purpose. This is dependent of people, the relations that they establish and their work environment⁽³⁻⁴⁾.

In the working process, the nurse can act in different dimensional practices that involve “caring”, “educating”, “managing”, and “researching”. These dimensions allow them to work for health, teaching and researching organizations, which are comprised of several sectors, being one of which is the Material and Sterilization Center (MSC)⁽⁵⁻⁶⁾.

The MSC may or may not be included in a health organization due to its likelihood of existing as an independent company, which provides sterilization services. It is an environment where equipment and materials are highly concentrated, with specific functions that contribute to the quality of the services provided by the units that consume their products⁽⁷⁻⁸⁾. The products made in the sector are dental-medical-hospital goods processed by means of receiving, preparing and sterilization, being subsequently sent to their final destination⁽⁹⁾.

In the Material and Sterilization Center, the elements of the nurse’s working process are different, for they are organized to fit the characteristics of each activity⁽¹⁰⁾. The sector is featured as an area where nurses take specific actions and make use of a wide range of empirical, scientific and technological knowledge for the coordination of work done during their daily activities.

From this exposition, the importance of knowing the practice of the MSC nurse is highlighted, in her working process as well as in the elements that comprise it, in order to understand what, for whom, how and why such actions are performed. It is fundamental to approach this issue, due to its complexity and the particularities of the professionals who work in the sector⁽¹¹⁻¹²⁾.

Moreover, the importance of the existing discussion around the permanence and the visibility of the nurse’s job in the MSC are emphasized, as well as the need to produce knowledge in the area, concerning the working process⁽¹¹⁻¹²⁾.

Regarding what has been presented, the guiding question of this research was: What is the perception of the nurses, regarding the elements of their working process in the Material and Sterilization Center?. To

answer this question, it was necessary to describe the group perception of the nurses about the elements of their working process in the Material and Sterilization Center.

METHODS

This study is of a qualitative approach, a descriptive type. The qualitative research deals with intuition and subjectivity, because it is an in-depth study of human actions and relations⁽¹³⁾. Descriptive type research aims to expose the characteristics of a phenomenon without the necessity of explaining them⁽¹⁴⁾.

The research field entailed the Material and Sterilization Center in the city of Curitiba – PR, wherein the individuals were nurses from MSC’s of health institutions – hospitals, clinics, sterilization companies – and universities (faculty members lecturing disciplines related to surgical centers and MSC content). Initially, eighteen health institutions were selected, according to the level of health assistance: primary, secondary e tertiary⁽¹⁵⁻¹⁶⁾. Consequently, the institutions were contacted by telephone to confirm the presence of a nurse in the MSC; then, a meeting was scheduled to invite them to take part in the research, and also to verify whether these institutions would agree with the selection criteria: being a nurse, working in the MSC area (in the sector or as a faculty member), and having over one year of experience in this area. As a result, fifteen nurses accepted and agreed to the terms of the selection criteria defined.

The technique of focal group, which allows a group of people to meet in sessions for a focused discussion of a specific issue, was used for data collection. This technique brings about moments of “collective thinking”, the expression of perceptions and values regarding a particular issue, and it also generates knowledge and change in thoughts⁽¹⁷⁻¹⁸⁾.

The group session took place in a public university and lasted for two hours, where 7 out of the 15 selected individuals were present. The recommended amount for a more in-depth discussion in the group is from six to fifteen⁽¹⁹⁾. The composition of the focal group used the literature as its guideline⁽¹⁹⁻²⁰⁾: a moderator who led the discussions – the researcher, bearing in mind her involvement with the topic -, and two observers - a professional and a faculty member-researcher of the field, both experienced in focal groups – who registered the time, the participant’s comments and reactions in writing on individual clipboards. The group sessions were also recorded in audio and video.

To conduct the focal group, a list of topics was elaborated – guidelines to conduct the session comprised of key moments and a list of questions addressing the proposed goals, and stimulus material. The key moments were: the introduction (presentation and information),

establishing the *setting* (emphasis on the ethical aspects of the research and agreement to the schedule), debate, synthesis and closing. Concerning the stimulus material, it encompassed literature concepts about the working process and its elements, and it started off the debate⁽²⁰⁾.

On dealing with the data, Bardin's⁽²¹⁾ thematic content analysis was used, where the stages proposed by the author were followed: pre-analysis, exploration of the material, handling the results and inference and interpretation. At first, the corpus was constituted – meeting, reading and selecting the registration units of the documents for analysis. Next, the exploration stage took place, along with the operations of coding – grouping of common registration units upon the selection of “topics” – for the confluence of the participants' reports. Finally, there was the handling of the outcomes, their inferences and interpretations, which enabled the condensation and refinement of the data and the meeting of the category.

The research was approved by the Board of Ethics and Research of the Health Science Sector at UFPR, registered under the number: CEP/SD: 222 SM 097.05.11. It met the n. ° 196/196 Resolution of the Health Ministry⁽²²⁾, guaranteeing the individual's rights pertaining guidance, secrecy, anonymity, the voluntary participation and the absence of losses. The subjects signed a Term of Free and Clarified Consent.

RESULTS

The group discussions were productive and allowed the meeting of the category, entitled “the nurses' working process in the Material and Sterilization Center as a focal group”, built from the analysis of the focal group data. The group had moments of reflection about the elements of the working process in the MSC, which can be recognized in the following accounts:

[...] see, I am really confused, okay? If your job is to sterilize the material then you should do it all; your object is the material, if your job is to also train an employee, the employee becomes an object [...] (EGF 4).

The doubt encompassed the nurses' reports which, amidst questioning their colleagues, attempted to understand the elements of their working process. In this sense, the usage of the stimulus material brought answers to the questions and made it a deeper discussion, since the subjects adopted different conceptual references of the working process elements and chose the ones they identified with, as seen in the following reports.

[...] look, let's take this terminology, Egry's definition: everything which is offered to the sight, what is offered to our sight?

What does an action involve [...] (E GF 6)

[...] I get confused when I read the definition of object, you know [...] it is complex [...] I don't know, I have to think this over, I will read aloud. Here, the second part: “everything that may be transformed with conscious intervention”, this is what I was trying to comment about (E GF 1)..

The difficulty to define the elements in the working process was mostly relative to the element “object”. It is known that in the daily routine of a MSC nurse the practical dimensions such as “managing”, “caring for”, “teaching” and “researching” are present in an articulate or not articulate form, depending on is the activity to be developed⁽⁵⁻⁶⁾. This fact enables the nurses to act on more than one object – materials and workgroups – and to transform them, because they employ activities that are relative to material processing, and they also develop educational practices with the team.

Another account represented the connections that one participant sought to define the object. In it, she defines the perception before the discussions and the one elaborated after reading the stimulus material, and from the contact with other people's ideas.

[...] I actually, I am confused with what I think and with what I see here, I am trying to connect things because, as I see it, or prior to these discussions, I would think like this: my object of work at the institution is the patient (E GF 1).

In general, the difficulty the nurses have to clarify the elements of the working process actually exists and is chiefly related to the identification of what they produce and the object of their work⁽¹²⁾. This, among other reasons, is due to the health services having the characteristic of consuming their products during their production, which makes complex both the discerning of the health working process and the measurement of the results of the actions of the professionals who work with them (23).

Regarding purposes, they depend on the objects apprehended and the technology (instruments) selected and applied at work. Subsequently, the group's perception that their job reflects on something greater is emphasized, because it reaches the patient through indirect care, and it should consequently aim for the quality of the service provided. Another aspect was the perception of technology as the purpose of their work, as seen in the following accounts:

[...] you are always aiming to improve your activity for professional growth. [...] it is a space that we have to fight to remain in, in the institution, so the development of all those working process activities within the institution always have to aim to reaching for a new technology, in which the knowledge distinguishes the nurse in this position [...] it is the application of new technologies.

The speeches presented before urged the group to realize the importance of searching for new ways to identify and valorize the nurses' work in the MSC, and at the same time to justify its existence in the future. The subject believes that the search, the improvement and employment of new technology can modify the nurse's working process to such a degree that knowledge must be utilized to distinguish in the position held by the nurse in the sector.

It is clear that the discussion contributed not only for the group to understand their work, but also to reach a synthesis, as a group. The synthesis showed the perception of a group of MSC nurses about the elements of their working process, and, to present it, the following diagram was elaborated (Figure 1)

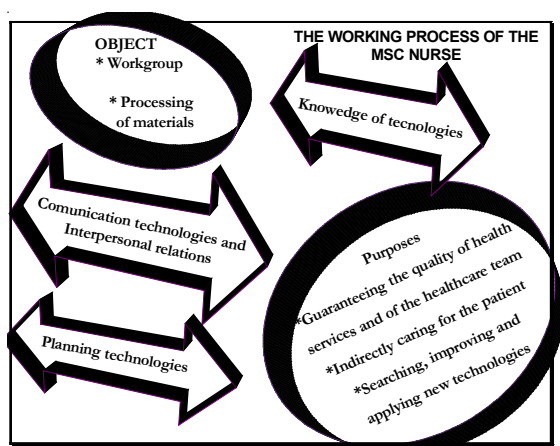


Figure 1 – Group perspective of the nurse's work process in the MSC

The perception of the focal group revealed the nurse's working process in the MSC as follows: the object is in the workgroup and in the processing of materials, the instruments in the technology planning, knowledge and interpersonal communication/relations. The purposes were: indirect care, quality and search and improvement of new technologies.

DISCUSSION

The participants of the focal group characterized the object as being either in the MSC workgroup, or in the material processing, which will depend on the nurse's focus of attention for each moment of her work. Management constitutes the main task of the MSC nurse, because the activities are concentrated on the organization of materials and personnel. As for the processing of materials, there is evidence that the concentration of administrative activities involving material resources leads to the verification that the processed or reprocessed hospital supplies are the MSC nurse's object of work.

However, it is likely that nursing may have more than

one object of work, which can be shared among administration, care, therapeutic environment, health teaching, etc. It depends on the activities that the nurse will perform in her working sector. As such, it is agreed that the elements of the nurse's working process should be compatible with the particularities of the professional practice, the complementary connection with the health work process notwithstanding⁽²⁴⁾.

Concerning the instruments of the working process, three large areas have been defined: knowledge, communication, and interpersonal relations and planning. These consisted of grouping the instruments, conceived as technologies and synonyms of means, utilized when knowing and doing are employed to reach a given purpose of the MSC working process.

The "knowledge" area was comprised by ability, manual skills; personal updating, theoretical scientific knowledge, empirical knowledge; continued education or education at work, team qualification, guidance; and research. Nursing makes use of articulated, non-excludent knowledge standards – empirical, personal, aesthetic, ethical, intuitive, historical, political, etc -, revealed in the daily professional practice, in which the nurse interweaves skill, sensitivity to build the art and science of the profession⁽²⁵⁻²⁶⁾. These different expressions of knowledge in nursing showed, among other things, the search for autonomy and construction of its own body of knowledge to base its execution in care and team coordination⁽²⁷⁾.

Regarding the "communication and interpersonal relations" area, communication, interpersonal relations, teamwork, active participation and involvement were grouped together. From the characteristics of the working process – social and collective practice – the MSC nurse establishes a network of group relations while she develops her actions, because she establishes relations with workers of her own professional category, of the healthcare area and, indirectly, with people who seek out the healthcare services for assistance. In this network, the nurse plays the role of manager of interpersonal relations, and the channels for this to occur are the communication, the involvement and in active participation of the MSC team in the activities⁽²⁸⁻²⁹⁾. Communication is a basic instrument, a tool in the nurse's working process, which can transform the individual and collective conscience, articulate theory and practice and qualify the actions of the team⁽³⁰⁾.

The "planning" area was composed with the following technologies: planning, organization; observation, supervision, coordination, documentation, registration of regulations and routines; decision-making, assorted resources; assessment, analysis; and dimensioning of personnel. Planning constitutes another working instrument of the MSC nurse, in that it promotes a systematization of future actions, and presents itself as an administrative know-how, which aids in the management

of the working sector^(6,31).

The nurse's working process is composed of practical dimensions – caring for, managing, teaching and researching – stemming from the complexity of her work, which enables her to accomplish work in more than one area⁽⁶⁾. In this sense, it can be seen that these areas were regarded in all three instrumental areas (technologies), since communication and interpersonal relations compose “caring”, “teaching” and/or “managing”; planning is in the “managing” dimension and knowledge is in the “teaching and/or researching” dimension. Each of the technologies mentioned is relevant to achieve the goals, since the choice and application will depend on the actions to be developed.

The purpose was also perceived as being comprised of objectives such as: guaranteeing the quality of the services provided and of the team; indirect care for the patient; search, improvement and application of new technologies. The goal of the MSC nurse's working process is characterized by the need of producing materials under safe conditions of use, and as such, it is directly linked to the quality of the services provided^(12,32).

Regarding indirect care, MSC healthcare has a distinguished configuration, in function of the inexistence of direct contact between the health professional and the patient. Hence, care relates to two aspects: the care with materials and their processing and indirect care, bearing in mind that the materials will subsidize the fulfilment of direct care, performed by the nurses in other sectors⁽⁸⁾.

The improvement and application of new technologies were identified as goals of the MSC nurse's working process, meaning that technology is the mediator between the thoughts and the transformation of these thoughts into actions and results⁽³³⁾. It is conceived that such a purpose may become an alternative to improve the nurse's practice, as an adequate adjustment of the existing technologies and the discovery of new ones, and also to allow for the publicity of the institutions where they work⁽³⁴⁾.

The data showed the existence of combined working objects and goals, defined in function of the MSC nurses' actions. Several combined instruments were demonstrated, and these were considered as nursing technologies, used in the transformation of the objects and achievement of goals, which promotes complexity to the nurse's working process in the sector.

CONCLUSION

The relevance of this study was recognized within the complexity of the topic, the theoretic reference, in the in-depth content of the discussions provided by the focal group and the data analysed. The focal group revealed that the adjustment of the MSC working process is a

responsibility of the nurse, which led her into the development of specific and particular activities. Therefore, it is understood that the elements of the working process should be compatible to the particularities of the nurse's practice, because they are related to her daily actions.

As such, the focal group allowed for a productive discussion, focused on the exchange of experiences, opinions, exposition of ideas and reflections. A transformation of thoughts was observed, along with an eagerness to receive and share knowledge and to express doubts and certainties clearly.

Regarding MSC functions, the nurse reveals the required competencies that encompass the sector administration, in the development of technical-assistance activities and in the management of human resources. Indeed, the professional needs to add a set of structured know-hows to the MSC physical structure which will grant competence and responsibility for the sector. Within this context, competence is used to employ several nursing technologies on the objects of work, aiming to transform it, and therefore reach the proposed goals for their working processes.

As said, it is believed that the uniqueness of the nurse in the sector is based on her detailed knowledge of the nursing healthcare actions, on being able to visualize the working necessities of other nurses, as well as other health professionals who use MSC products, and this confers them the fundamental characteristics to coordinate the sector.

It is essential that new ways of thinking can be cast on the nurse's working environments so that the elements that make up this process can be unveiled in order to understand, reconsider and publicize their actions, to articulate care, management, teaching and researching.

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