

## NURSES' WORK PROCESS IN A HOSPITAL IN SPAIN: EMPHASIS ON THE TECHNOLOGIES OF CARE\*

Maira Buss Thofehrn<sup>1</sup>, Maria José Lopes Montesinos<sup>2</sup>, Isabel Cristina Arrieira<sup>3</sup>, Veridiana Corrêa Àvila<sup>4</sup>,  
Tânia Cristina Schäfer Vasques<sup>5</sup>, Izamir Duarte de Farias<sup>6</sup>

**ABSTRACT:** This descriptive and exploratory study with a qualitative character aimed to investigate the work process of the nurses in a University Hospital in Murcia, Spain. Eight nurses participated, who undertook care and management activities. The information was obtained in the period November 2011 – January 2012 through self-observation and description, by the nurses themselves, in relation to their understanding of their work process. The texts produced were sent to a group of researchers by email and the data were analyzed using thematic analysis, with the following themes emerging: the importance of end of shift handover as a technology of care, and actions of the nurses with views to the development of a care technology. It was evidenced that the nurse functions as a cornerstone in the work process, taking on responsibilities in the search for technologies for carrying out the work.

**DESCRIPTORS:** Work; University hospitals; Nursing; Technology.

---

\* Original article produced based on the post-doctoral placement undertaken in Murcia, Spain, with financial assistance from the Coordination for the Improvement of Higher Education Personnel (CAPES).

<sup>1</sup>RN. Ph.D in Nursing. Professor of the Faculty of Nursing of the Federal University of Pelotas. CAPES-funded scholar on the post-doctoral placement in the Faculty of Murcia, Spain.

<sup>2</sup>RN. Ph.D in Nursing. Professor at the University of Murcia, Spain.

<sup>3</sup>RN. M.Sc in Health Sciences. Professor in the Faculty of Nursing of the Catholic University of Pelotas. Doctoral student in Nursing. Pelotas-RS-Brazil

<sup>4</sup>RN at the Associação de Caridade Santa Casa. Rio Grande-RS-Brazil

<sup>5</sup>RN. M.A in Nursing. Federal University of Pelotas. Pelotas-RS-Brazil

<sup>6</sup>Senior Technician in Arts. MSc in Health Sciences. Tutor on the Specialization course in Media in Education, Distance Education. Federal University of Pelotas. Pelotas-RS-Brazil

**Corresponding author:**

Maria José Lopes Montesinos  
Universidade de Murcia  
Campus Universitario de Espinardo, s/n, 30100 Murcia - Espanha  
E-mail: mjlopez@um.es

**Received:** 23/09/2013

**Approved:** 11/12/2013

## INTRODUCTION

Nursing, as a health profession, has been recognized since the second half of the 19th century, since Florence Nightingale standardized a view of health care activities which until then had been undertaken by people or groups with different qualifications and in different settings. Care adds speciality in the set of the division of social work, being recognized as a field of specialized activities which are necessary for society and which, to be exercised, require special training and the production of knowledge, upon which the action of these professionals is based<sup>(1)</sup>.

This knowledge gives nurses competences to care for people, in their process of living, educating and research, which includes the act intrinsic to the process of caring, involving continuous education at work, the training of new professionals and the production of knowledge which supports the care process. Emphasis is also placed on the administrative dimension of coordinating the collective work of nursing, of managing the care space, of participation in the management of healthcare, and in the institutional management<sup>(2)</sup>. Therefore, the quality in the nursing actions is reflected in the quality of the health care.

In this regard, the perspective of the technology of care as a professional activity represents an important reflection for nursing, covering a significant part of its actions, thus making it possible to reflect on the work process, in a broad form, and also valorizes the professional competencies which are necessary for the provision of the care<sup>(3)</sup>.

In this way, the production of the technology is essential for the innovations in the area of health and nursing, as it assists the organization of the service, the ways of caring, and underlies and renews the practice of the professional exercise. The production and utilization of the technology cause a reflexive posture, based on ethical principles for professional decision making. Moreover, the results of the utilization of the technology permeate the context of the practice of nursing<sup>(3)</sup>.

Thus, the process of work in health, even being a service which triggers a human activity, also operates a transformation, subordinated to a specified end, in the object upon which it functions through the instrument<sup>(4)</sup>. The object of work is not transformed in another, but in the promotion of health of the people/population who seek the hospital organizations.

In this focus, nursing, through the nurse's systemic vision, has conditions to mobilize the team effecting

the process of care, inserting the technology. Thus, the technology's results and impacts will depend on the professional's knowledge and reflection, which guide how it will be utilized. Therefore, this establishes the action of the professional in undertaking the care<sup>(3)</sup>.

The development of care technology involves the three forms of technologies present in the productive process of work. Adapted to this study correspond to the hard technologies, which are the materials, equipment, machines and other instruments utilized during the undertaking of the care. There are also the light-hard technologies, understood as all of the knowledge and care methodologies in the undertaking of the care. And finally, there are the light, or relational, technologies which are necessary around the action of caring<sup>(5)</sup>.

As a result, nursing needs to position itself and recognize that its work is essential in the care for the patients, making the implementation of the technologies of care viable, through seeking innovations, with a critical vision of the doing, making a transformation of the routine reality possible. Thus, it makes greater visibility possible for these professionals, who are sometimes not recognized in their daily tasks, improving their quality of life and personal satisfaction<sup>(6)</sup>.

Thus, this study aimed to investigate the work process of the nurses in a University Hospital in Murcia, Spain, in relation to the technologies of care.

## METHOD

This study is characterized through presenting a qualitative, descriptive and exploratory approach which met the ethical recommendations for studies involving human beings, and was undertaken following the favorable decision of the Ethics Committee under decision n. 191/2012. The research was undertaken through self-observation and a description of the work routine of the nurses who work in different areas of the Hospital Reina Sofia de Murcia in the city of Murcia, Spain. The above-mentioned hospital has 320 beds distributed in the Emergency Room, Operating Room, the Intensive Care Unit, and inpatient units such as cardiology and pneumology, among others.

The participants in the study were eight nurses from the inpatient units, the Intensive Care Unit, Emergency Room and nurses in management roles in the nursing service. The team is made up by the nurse who is the unit's manager and auxiliary nurses, it being the case that the auxiliary nurses may not work without the presence of the nurse, their role being related to lower com-

plexity procedures, such as hygiene and patient comfort.

Data collection occurred in the months of November 2011 to January 2012. A meeting was held with 12 nurses from the hospital institution in question, in which the study objectives were presented and the nurses were prompted to reflect about their work process. Following this process, eight nurses accepted the challenge of describing their activities from one day of work, this description being sent to the group of researchers via email. The participants were identified by the letter "N", followed by the ordinal number corresponding to the order in which the process of the research was undertaken.

The data were treated using Thematic Analysis<sup>(7)</sup>, from which the following themes emerged: the importance of the end of shift handover as a technology of care and nurses' actions with a view to the development of a technology of care.

## RESULTS

Analyzing the profile of the eight nurses who participated in the study, one observes that the age varied from 32 to 53 years old; in relation to time since qualifying, it varied between 7 and 27 years, and the time worked in the institution varied between 4 and 25 years. Moreover, five undertook activities characterized as assistential, and three worked in management positions. It should also be noted that only one of the eight nurses participating had undertaken specialization and a Master's degree.

### The importance of end of shift handover as a technology of care

Considering that nursing care in hospital is characterized by its uninterrupted character, the meeting of the nurse who is finishing her shift with that who is taking over responsibility for the work is the guarantee of this continuity. For this, one can perceive the importance of communication in the end of shift handover, both verbal and written, for there to be coherent continuity of care for the patient, so as to give continuity effectively to the procedures undertaken by the earlier team, as identified in the accounts below:

*The nurse from the earlier shift tells us of the patient's diagnosis, the situation in the last few hours, whether there is some test to be done, the family's situation.* (N2)

*The end of shift handover is undertaken jointly with the auxi-*

*liary nursing personnel. It lasts 10-15 minutes, we learn the patient's clinical status, we communicate the problems detected or resolved and it also allows us to organize, with the auxiliary, the tasks to be performed jointly during the shift.* (N3)

The nurses' commitment to the end of shift handover is perceptible, demonstrating that they value doing it, as exemplified below:

*I describe the activities undertaken in the hospital unit, all the shifts begin the same way, dividing the essential information on the care between the nurse leaving and the nurse arriving, it's an extremely important intervention and decisively marks the work day.* (N5)

*Objective data are transmitted, which we quantify in our graphs, as are personal impressions which our colleagues pass on to us, which guide us in our work later.* (N8)

When this communication is not effective, on the contrary, often the professional from the next shift does not visualize the work done with the patient on that shift, which can provoke frustration in the professional, who feels discouraged by the lack of continuity of the care on the part of her colleagues, as can be seen in the accounts below:

*If I consider that the care on the previous shift was not adequate, it causes me a great feeling of sorrow for the patient and disappointment in relation to my colleague, and I ask myself about the meaning of "teamwork" and "continuous care".* (N4)

### Actions of the nurses with views to the development of a technology of care

It has commonly been observed that the nurses take on various activities, causing these to have a vision of the entire running of the nursing service, becoming involved in the care as a professional task, as observed in the statements below:

*Preparing the prescribed medication, administering it during the shift, collecting blood samples, reviewing the invasive and non-invasive therapeutic mechanisms, promoting walking, hygiene and reviewing the patient's skin integrity; we record all of the nursing activities and complications on the computer.* (N3)

*Interventions regarding the care of the surgical wounds, pain management, and drain care.* (N6)

*We check the bed spaces, we top up the medication and material, also the correct functioning of the emergency care equipment, and the medication and material on the emergency trolley. Then we go on to undertake the work carrying out the peripheral venous catheterization. (N7)*

It was also ascertained through the accounts that the nurse's work routine relates to managerial, assistential, and educational activity.

*Attention for the students who pass through the unit. (N1)*

*I would like to spend less time on bureaucratic activities or in interminable meetings (many of them unproductive) and spend more time in the units, close to the assistential nursing, I think this would allow me to know better the reality and which strategic lines I should develop to improve the quality of care which we give to the service users. (N2)*

*I note the reason for the appointment in the file, the data which I measured, I check if the patient has the identification wristband, and I issue an authorization so that a family member may come in to keep the patient company. (N8)*

Another aspect which is also important in the daily doing of the nurses is preparing favorable environments and conditions for undertaking and maintaining procedures, in which the light-hard technologies can be evidenced, with the aim of providing greater quality in the care through technical-scientific knowledge acquired by the nurses, providing the patient with well-being. Such aspects are evidenced in the accounts below:

*We attend the bells and the telephone and, in conjunction with other professionals, plan the preparation of the rooms for inpatient treatment. (N1)*

*We participate in the doctor's visit, continuous evaluation of the patient's well-being, of his comfort in general. (N4)*

## DISCUSSION

### The importance of the end of shift handover as a technology of care

It is a fact that end of shift handover is a time for updating information and continuity of the care, also having the function of keeping the nurses and the nur-

sing team united. In a certain way, it reveals the expression of professional cooperativism, taking on, at that time, a supreme representation, shared by the peers<sup>(8)</sup>.

In this way, the end of shift handover becomes an essential procedure in a nurse's work, irrespective of the place, country, culture or department in which she exercises her role. It is also understood as a time of learning about the patient, his diagnosis, and clinical and nursing complications<sup>(9)</sup>. Thus, for this study, it is evidenced as the first step in the development of a care technology.

To this end, communication becomes an important tool, being valorized and essential throughout this process, involving the exchange of information, and the relating and the comprehension of the knowledge, transmitted in the handover<sup>(9)</sup>. As a result, the change of shift is a practice in which communication is used as a basic nursing instrument, with a view to transmitting objective, clear and concise information about the occurrences which took place during a period of work, involving direct and indirect patient care as well of matters of institutional interest<sup>(10)</sup>.

It is evident that this time, in which the professionals meet in order to socialize the information referent to the shift, is crucial for the next shift to be successful, as what happens during each moment of work of the nursing team refers to the patient's progression, which, in many cases, can be fundamental for the patient's life. When the care provided by the previous shift is inadequate, it is through the end of shift handover that it becomes possible to address such divergences, until a nursing team is formed with healthy links, in this way being able to ensure the continuity of care.

Thus, in this aspect, the professional nurse can become a link in the relationships, ensuring that the human relationships are harmonious and productive, so that the aim or objective of the work may be a care with better quality of life for all those involved<sup>(11)</sup>. In short, the end of shift handover must be seen as a time which transcends a simple exchange of information, and which can serve as a time for reflection and evaluation of the interdisciplinary work, aiming for mutual growth and better performance of the health work<sup>(10)</sup>.

### Actions of the nurses with views to the development of a technology of care

In analyzing the activities which are the responsibility of the nurses, it falls to this professional to develop skills in her process of care, involving attitudes and behaviors based on scientific, technical, personal,

cultural, psychological and spiritual knowledge, with the aim of obtaining a broad view of her field of work<sup>(6)</sup>.

As a result, care in nursing is considered the essence of this profession, this care being divided in two aspects: objective, encompassing techniques and procedures, and subjective, guided by the nursing professionals' intuition and perception<sup>(6)</sup>. Therefore, the nurses' tasks relate to their practical doings, such as the theoretical and relational. Thus in his daily doing, he passes to utilize the technologies even without noticing, among which we can cite: the hard technologies, through the use of equipment and devices; or through the utilization of procedures, with specific knowledge, which may be classified as light-hard technologies, as is the case of the utilization of a nursing care methodology, and also the use of light technologies, with a focus on interpersonal relationships, in which the nurse has his team and his patients as the object of his work<sup>(6)</sup>.

In this context, the care, as a professional task, corresponds to the nursing action as a technology for achieving an end. Thus, this task can be recognized as a technology of care, as the nursing action can only be made effective based on a theoretical grounding and technical skill<sup>(12)</sup>.

In this way, the recognition of the activities carried out by the nurses in the institutions' routine is fundamental, given that it makes it possible to visualize the gaps existing in their work and, consequently, helps in outlining their functions. In addition to this, they can bring elements which contribute to the performance of more creative, innovative, participative actions, which are closer to the patient and to the worker, promoting the knowledge of the real needs of those involved in this work process<sup>(13)</sup>. However, possibly due to the diversity of roles which fall to the nurses, on many occasions, the technologies termed as light are little used in practice by the nurses in their daily care<sup>(11)</sup>.

The nurses also dedicate their time to educational activities, relevant to the information system, which are relevant for the systematization of the care and the functioning of the service<sup>(13)</sup>. To this end, these professionals invest in the students' education, regarding their reflexive-critical process, proposing innovative and creative forms of educating, concerning themselves with the educational process and the values which are being constructed for them<sup>(14)</sup>.

Remaining on the subject of the role of the educators, these workers also guide the population so that they may become agents of the promotion and protection of their health and of the community in which they are integrated, in a horizontal relationship, of equality. Therefore

there is a process of raising the subjects awareness so that they may obtain greater control over their lives<sup>(15)</sup>.

It is relevant for the nurses to continuously reflect on the actions of care, so that this worker comes to take responsibility for her nucleus of work and exercise autonomy, receiving recognition and valorization of her work<sup>(16)</sup>; in addition to contributing to the strengthening and consolidation of nursing as science and technology<sup>(17)</sup>.

In this context, it may be perceived that the technology of care in nursing can become an instrument for strengthening and qualifying the same. In this way, in talking about technology, one is referring to interlinked procedures of knowledge and instruments, in a systematized way of the knowing-doing<sup>(6)</sup>. Thus, the care for patients is something which becomes more effective when one incorporates the technological processes and expressions of knowledge, with the aim of a work which is alive in action, systematized and organized<sup>(6)</sup>.

## FINAL CONSIDERATIONS

The study shows that the nurses work in a broad way, initiating their work days based on the receiving of the end of shift handover from the previous shift, this being an important act for the contextualization of the reality and planning of the actions. In this way we can assert that the technology of care in Spain has its starting point in the end of shift handover, which occurs in a detailed way, dedicated to the patients, and with the nursing team.

Regarding the activities performed by the nurses, it was observed that these are related to direct care for the patients, care for the environment, and activities with the undergraduate nursing students. The importance of the teamwork also stood out, in some cases being reported by the nurses as essential for the good functioning of the unit and consequently for the quality of the care.

It also became evident that all the decisions pertaining to the care for the patients and their families pass through the nurse, who acts as a point of reference for the team, being present and working in each step of the work process. The nurses also showed interest in the continuous search for knowledge, making possible continuous development of the profession with the vision of the comprehensiveness of the care for the patients and their families.

The study provided the understanding of the work process of nurses who work in a general hospital in Spain, allowing us to broaden our vision in relation to the spaces occupied by these professionals in the international scenario.

## REFERENCES

1. Pires D. A enfermagem enquanto disciplina, profissão e trabalho. *Rev. bras. enferm.* 2009;62(5):739-44.
2. Pires D, Matos E. Teorias administrativas e organizações do trabalho: de Taylor aos dias atuais, influências no setor saúde e na enfermagem. *Texto Contexto Enferm.* 2006;15(3):508-14.
3. Crozeta K, Stocco JGD, Lambronic LM, Meier MJ. Interface entre a ética e um conceito de tecnologia em enfermagem. *Acta Paul. Enferm.* 2010;23(2):239-43.
4. O capital: Crítica da economia política. Trad. Reinaldo Sant'anna. Rio de Janeiro: Civilização Brasileira; 2011.
5. Franco TB, Merhy EE. Cartografias do Trabalho e Cuidado em Saúde. *Rev. Tempus Actas Saúde Colet.* 2012;6(2):151-63.
6. Rocha PK, Prado MLP, Wal ML, Carraro TE. Cuidado e tecnologia: aproximações através do Modelo de Cuidado. *Rev. bras. enferm.* 2008;61(1):113-6.
7. Minayo MCS. O Desafio do Conhecimento: Pesquisa Qualitativa em Saúde. 12ª ed. São Paulo: Editora Hucitec/Rio de Janeiro: ABRASCO; 2010.
8. Penaforte MHO, Martins MMFP. A visibilidade do autocuidado relativo à higiene na passagem de plantão dos enfermeiros. *Rev. Latino-Am. Enfermagem.* 2011;19(1):1-9.
9. Rodriguez L, Oliveira EO, de França CS, de Andrade TRS, Campos JSPAC, Silva MP, Costacurta FJ. Mapeamento da passagem de plantão sob a ótica dos profissionais de enfermagem. *Enfermería Global.* 2013;31:219-31.
10. Silva EE, Campos LF. Passagem de plantão: revisão da literatura. *Cogitare enferm.* 2007;12(4):502-7.
11. Pereira CDFD, Pinto DPSR, Tourinho FSV, Santos VEP. Tecnologias em enfermagem e o impacto na prática assistencial. *Revista Brasileira de Inovações Tecnológicas em Saúde.* [Internet] 2012;2(4) [acesso em 15 set 2013]. Disponível: <http://ufrn.emnuvens.com.br/reb/article/view/3331>
12. Thofehrn MB, Leopardi MT. Teoria dos vínculos profissionais: Um novo modo de gestão em enfermagem. *Texto Contexto Enfermagem.* 2006;15(3):409-17.
13. Costa RA, Shimizu HE. Atividades desenvolvidas pelos enfermeiros nas unidades de internação de um hospital-escola. *Rev. Latino-Am. Enfermagem.* 2005;13(5):654-62.
14. Jesus MCP, Santos SMR, Merighi MAB, Oliveira DM, Figueiredo MAG, Braga VA. Vivência do estudante de enfermagem em atividades de educação em saúde. *Cienc. cuid. saude.* 2012;11(3):436-44.
15. Monteiro MAA, Oliveira SHS, Pinheiro AKB, Ximenes LB, Barroso MGT. Promoção da saúde de puérperas: conhecimento e práticas de enfermeiras. *Rev. Rene.* 2012;13(2):280-90.
16. Persegona KR, Rocha DLB, Lenardt MH, Zagonel IPS. O conhecimento político na atuação do enfermeiro. *Esc. Anna Nery.* 2009;13(3):645-50.
17. Ministério da Saúde (BR). Conselho Nacional de Saúde. Regulamento do Sistema Único de Saúde. Portaria 2048/2009. Brasília (DF): MS; 2009.