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ORIGINAL ARTICLE

THE REFLECTIVE PRACTICE AND DEVELOPMENT OF COMPETENCE OF NURSING STUDENTS CARING FOR CRITICAL CARE PATIENTS

LA ORIENTACIÓN PARA LA PRÁCTICA REFLEXIVA Y EL DESARROLLO DE HABILIDADES DEL ESTUDIANTE DE ENFERMERÍA EN CUIDADO INTENSIVO DEL PACIENTE

A ORIENTAÇÃO PARA A PRÁTICA REFLEXIVA E O DESENVOLVIMENTO DE COMPETÊNCIAS DO ESTUDANTE DE ENFERMAGEM NOS CUIDADOS AO DOENTE CRÍTICO

Maria da Conceição Batista Correia[1], *Maria Dulce Santos Santiago*[2]

ABSTRACT

Objective: to characterize how the nursing student reflects on his/her clinical learning experience in the care of a person in a critical situation at the intensive care unit. ***Method:*** this was a qualitative study based on the analysis of narrative contents produced by eight nursing students in clinical teaching courses between January and February of 2011. The narrative was free and built from the reflection on their experiences in caring for the person in a critical condition. The analysis was based on the review of the literature in this thematic area and on the teaching experience of the authors. The procedures used in this study comply with international standards on human experimentation (Helsinki Declaration, 1975) and the Ethics Committee of the National Health Council of Brazil 196/96. ***Results:*** the analysis allowed the identification of five dimensions in the process of building skills, in particular, cognitive, relational, technical, attitudinal, and ethical and moral characterizing several thematic categories. ***Conclusion:*** the highest frequency of registration units occurred in the cognitive dimension followed by the attitudinal dimension, and equally relevant in the relational and technical dimensions. Several ethical situations were described by the students; however, these were not identified within the framework of this dimension. ***Descriptors:*** nursing; professional competence; intensive care; clinical practice.

RESUMO

Objectivo: caracterizar o modo como o estudante de enfermagem reflecte sobre a sua experiência em acção, no cuidado à pessoa em situação crítica durante o ensino clinico, em cuidados intensivos. **Método**: estudo de natureza qualitativa, realizado com base na análise de conteúdo das narrativas elaboradas por oito estudantes de enfermagem, em ensino clinico, entre Janeiro e Fevereiro de 2011. A narrativa é livre, construída a partir da reflexão sobre o modo como vivenciam o cuidado à pessoa em situação crítica. A análise é sustentada na revisão de literatura nesta área temática e na experiência docente das autoras. Os procedimentos usados neste estudo respeitam as normas internacionais de experimentação com humanos (Declaração de Helsínque, 1975) e do Comitê de Ética do Conselho Nacional de Saúde do Brasil 196/96. ***Resultados***: a análise permitiu-nos identificar cinco dimensões do processo de construção de competências, nomeadamente, cognitivas, relacionais, técnicas, atitudinais e ético-morais, caracterizando-as em diversas categorias temáticas. ***Conclusão*:** salientamos que a maior frequência de unidades de registo ocorre na dimensão cognitiva, logo seguida da dimensão atitudinal, mas são igualmente relevantes nas dimensões relacional e técnica. São descritas pelos estudantes diversas situações de foro ético, mas não são contudo identificadas num enquadramento dessa dimensão. ***Descritores***: enfermagem; competência profissional; cuidados intensivos; prática clínica.

RESUMEN

Objetivo: caracterizar la forma cómo el estudiante de enfermería reflexiona sobre su experiencia en la acción de cuidar a una persona en estado crítico durante la enseñanza clínica, en cuidados intensivos. ***Método:*** estudio de naturaleza cualitativa, realizado con base en el análisis del contenido de las narraciones producidas por ocho estudiantes de enfermería, en la enseñanza clínica, entre Enero y Febrero del 2011. La narración es libre, construida a partir de la reflexión sobre la experiencia de cuidar a una persona en estado crítico. El análisis se apoya en la revisión de la literatura en esta área de estudio y la experiencia docente de los autores. Los procedimientos utilizados en este estudio cumplen con los estándaresinternacionales en materia de experimentación con seres humanos (Declaración de Helsinki, 1975) y el Comité de Ética del Consejo Nacional de Salud de Brasil, 196/96. ***Resultados:*** el análisis nos ha permitido identificar cinco dimensiones del proceso de desarrollo de habilidades, en particular, las cognitivas, relacionales, técnicas, de actitud y ética-moral, caracterizando-las en diversas categorías temáticas. ***Conclusión:*** Observamos que la mayor frecuencia de unidades de registro ocurre en la dimensión cognitiva, seguida de la dimensión de actitudes, pero también son relevantes en las dimensiones relacional y técnica. Son descritas por los estudiantes diversas situaciones de foro ético, pero todavía no se han identificado en uno encuadramiento de esa dimensión. ***Descriptores:*** enfermería; competencia profesional; cuidados intensivos; práctica clínica.

[1]Master in Education Science in Curriculum Development and Evaluation specialization, Nurse Specialist in Medical-Surgical Nursing. PhD in Nursing at the University of Lisbon, Associate professor at School of Health - Beja Polytechnic Institute. Beja, Portugal, E-mail: conceicao.correia@ipbeja.pt; [2]Master in Nursing Science, Nurse Specialist in Medical-Surgical Nursing. Doctoral Student in Nursing at the Portuguesa Catholic University, Associate professor at the School of Health - Beja Polytechnic Institute, Beja, Portugal, E-mail: dulcessoares@gmail.com

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INTRODUCTION

The initial training in nursing comprises a theoretical and practical component in clinic learning, with an equal or very similar to the credit hours.

It is in the clinical education period where the students confront the usage and adequacy of the knowledge and capacities with which they use in action, trying to create and develop competencies in the context of nursing care, with the orientation and tutoring of a nurse in the clinical teaching unit where under a teacher's supervision.

Considering that the explanation of the action through narration is more than a description, it necessarily involves reflection and mobilizes knowledge.[1;2] This article's theme focuses on the importance of the the student learning process during clinical training and it arises from our professional practice as nursing teachers, with the responsibility for student planning, orientation and evaluation in the theoretical period and clinical training.

Our motivation is inserted in the question that we have been asking for several years on student training in clinical practice in a hospital context and more concretely about the way that the students develop the acquisition of competencies during their initial training, during the clinical learning, in critical patient care centers.

The expression clinical training refers to the practical training period that is performed in the context of a health organization, involving several parties besides the student, including the user/family, nurse/tutor, the teacher and the health team.

In this clinical training in nursing medical surgery specialties which we refer to, the student is asked to prepare a narration from the reflection process on their performance in that specific care context, considering the appreciation of the opportunities and constraints and the way they can be experienced for the acquisition and development of several competencies. It is suggested as a strategy that after each shift, the student writes down the aspects that they felt as important for their training and try to base the self appreciation of their performance in the light of the knowledge that they have at this stage.

The education and training, will have to evidence, above all in the clinical training period that they are not sequential systems but interactive and convergent systems[3;4]. The training will have to enable and be the incentive for the permanent questioning about "things", with a common goal in offering orientation for a more "comprehensive" view at the action context.[5]

● The competence concept

From the term Competence, in its different assertions - Competency, competence, competencies, is one of the key-words for our research, we consider it essential, to highlight, in a synthesized way, some perspectives on the concept, though we will not occupy ourselves with considerations of paradigmatic analysis.

There are authors that consider competence an objective concept that can be measured and standardized, evaluated through exams, evaluation instruments or scales, while others understand that it is further beyond behaviors in different performances.[6] In fact, it is a construct and it is also seen as the capacity to integrate knowledge, skillfulness and behaviors when present in health care.

Reflection on competencies has an current importance and growing use and above all:

> *"competence with larger transverseness and that which is universally transferable. It is exactly each one's capacity to believe and make deep conviction practical that one is a valid human being who is different from the others and that, anywhere, in any context and with any other human being, it is always possible to find the moment of being unique and, really, make the difference."*[7]

Therefore, we are what we do and give meaning to our action; we identify ourselves in the way we do things. We can develop and give sense to the construction of our competencies, the more we know how to reflect about our actions and their fundaments.[5] Some authors[6,8-9] clarify, based on the literature review that they performed, the concept of competence, contrasting it with the meaning of qualification. This has a perspective which has more to do with function or organization, while competence is more nuclear with emphasis on the individual or group and knowledge, behavior or other knowledge domains.

The different areas of competence being generic or specific, and the different domains that define them and characterizes them, have been very well studied, since the last decade, mainly in the professional education and health areas and particularly in nursing.

In nursing training, there has been a notable change with the integration system in graduation courses at the bachelor level and with the adequacy to the alterations recommended by the Bologne Process.

The nurse's competencies in general care attributed by the Council of Nurses[10], have been the guide in the definition of programmatic contents and for clinical educational objectives, within several fields, in their nursing course. More recently, with the introduction of a new professional development model that is based on a model of tutored practice that takes place during a year with training based on the nurse's general care competencies, they should obviously conform to a set of operational questions, which will hopefully imply a more strict involvement of the care, teaching and investigation organizations.

This proves to us and at the same time it corroborates other authors on the necessity of articulation between personal dimension and professional training, the complex relation between theoretical knowledge and knowledge that is constructed in the action which frequently constitutes completely ignored dimensions.

● Competence, care and reflection

The analogy between competence and care are concepts that both need clarifying. Care brings us to a humanist intervention in which the relational competences have to be present, mobilizing the interaction and the fundamental principles of a therapeutic relation.[14] The competence, as we have already said, is based on other aspects, in the appropriation of values, knowledge, being cognitive, technical, instrumental and relational.

Competence results in a process that requires a construction that is not confused with the activity or function and it suggests the mobilization of knowledge. Fractionating competence in microscopic units leads to the loss of its global sense. We share the opinion that, as a system, competence should be considered in terms of connections and not of separations or disintegrations.[2]

Reflection while written exercise allows learning development in clinical practice in a demanding process of knowledge articulation. When the student truly applies their self in this questioning and self appreciation exercise, they permit the construction of knowledge in a process that is much more identifying and that requires the counselor, teacher and collaborators the use of planned strategies that promote personal and pedagogic competences in all participants. [5,7]

● Context

Context is a possibilities field for competences.[2,15] The intensive care unit of (ICU), is a care context with specific characteristics, seen as a meticulous service with professional teams which are specialized in taking care of patients in vital risk situations, supported by a diversified range of state of the art equipment, differentiated by superior technology that brings a more important consideration in the student's training. At the same time the student is given access to a differentiated care unit, which is not usually accessible, it allows close patient contact in critical situations with one or more vital functions, becoming the focus of all the attention and care. It is also a high morbidity context with higher failure and mortality rates.

The student is attending the teaching clinic preceded in each semester, for a theoretical period where the programmatic contents are developed in the same thematic area into which the clinic teaching will be applied, there remains a short period (140 hours) but this allows the essential contact to “uncover” and learn that which can only be acquired *in situ*.

There is obviously a previous clinical teaching planning period with a preparatory meeting aiming at guaranteeing each student’s integration on a care team. The student provides care under the direct counseling of a tutor nurse, with who defines which actions they can progressively develop, while obtaining some autonomy in each situation, skill and knowledge that they are able to mobilize.

This clinical training is intended to promote the development of observation and analysis capacity on each critical patient’s situation so that each student can trace their objectives, acquiring competences in care provision to the person, by articulating knowledge.

As a strategy, each student is under a nurse's tutoring and some counseling is recommended for the critical and reflexive analysis on their own performance in that context and the importance that they are given for their training. It is given to the student that after each shift, they make notes, based on serious questioning on the work that they developed and consider being more significant in their learning process. The student, upon their critical written reflection, which they prepare at the end of the practice period, based on the notes that they made, will mobilize and articulate different kinds of knowledge.

Nursing students acquire practical knowledge (conventions from the profession, language, values, methods, traditions and knowledge from their actions) mainly during

"practical" training, therefore, the students "learn in the act".[1,12]

However, when one says that "it is not easy for anybody to describe how they act, since know-how is hard to express and building competence references like, endless lists of skills, know-how and know how to be (...) can reduce the impact"[2], we emphasize that fractionating competence into microscopic units, leads to the loss of its global sense. As a system, competence should be considered in terms of connections and not separations. This is why it is important not to minimize the difficulties in developing reflexivity; this requires a mediation act that will have to be considered and animated by the teacher from the beginning of the future professional's training. This function is rigorously implemented in this training triad is consists of the student, nurse tutor and teacher, focusing on the interventions towards and with the patient, in a specific context.

METHOD

For this article, we considered a sample consisting of eight free narrations, written with no previous guidance indications, by 3rd year licensed nursing students who have trained in intensive care clinical teaching units, in four distinct hospital units. The analysis is sustained by the supporting literature and from the experience for more than a decade with teachers, responsible for counseling students, emphasizing reflection on actions.

As we have previously stated, it is recommended that the student, after each shift, make notes, based on their serious questioning about the work that they developed, what they did, how they did it and why they did it, what meaning they give it from the training point of view and as a basis.

We have performed a previous initial reading and started to organize the reflections written by assigning a code to each one with a letter from A to H and a number, which indicates each reported unit highlighted on it. As we move forward to content analysis, it is predominantly inductive, through prolonged text readings, uncovering meanings. According to what is recommended by the authors,[17] afterwards, searching for data conceptualization (word not found in the dictionary) from the data, we start to separate sentences, paragraphs, observations, by giving them a name grouping them into categories.

The analysis was performed on a systemized grid, displaying the analysis dimensions, as well as the correspondent categories and indicators for each reflection according to the previous referred to codification. Include on the same grid are two columns for the registration of absolute frequencies and enumeration units for each highlighted registry.

Dimensions	Registry units
Cognitive	27
Relational	18
Technical	17
Attitudinal	23
Morally Ethical	5

Figure 1. Competencies identified/developed in clinical teaching at UCI

RESULTS AND DISCUSSION

As for the characterization, these students are between 19 and 22 years old, 6 of them are female and 2 are male and they have developed clinical training in different hospital institutions.

From the analysis performed at each narration, excerpts were separated that received suggested meanings and grouped according to the grid described above, having named the five dimensions that in chart I, are indicated by the registry frequency units written for each one.

Identification of the dimensions found in this thematic area under study, has not always been exclusively capable itself because of the transverseness of many elements that characterize them and because of the multiplicity factors involved in several learning situations.

After a few reformulations and according to the highlighted registry units, frequency and number of indicators suggested, due to the outlined objectives, from the set following categories emerged:

- Reception towards the student
- Care continuation: registries and changing shifts
- Care towards the critical state patient
- Equipment handling
- Therapeutic relation in caring for the critical state patient
- Communication and interaction with the patient/family
- Interaction and learning strategies
- Facing failure and death.

● Reception towards the student

The opportunity to practice the newly-acquired theoretical knowledge learned brings a mix of anxiety, responsibility, and feelings of "being tested".

The high expectations towards the possibilities that the practice context involves, together with feelings of fear and insecurity, are reported in all the reflections, highlighting the importance of the first moment with the team and mainly with the nurse and tutor.

> *On the first day I felt like I was going explode, with all the information they gave me, and what I could observe (H2).*
>
> *With a big expectation, a new hospital, everything was new to me and I didn't know how I would react and "assimilate" a context where human life was presented so damaged (D1).*
>
> *I arrived full of expectations towards work, tutor, team and essentially myself. (G1).*
>
> *The head nurse showed me around the whole workplace and told me about his function and I read protocols and clarified a few doubts with him. (A3).*

In the narratives, the student characterizes the context where clinical learning takes place, highlighting the diversity of equipment and fear that all this apparatus around the patient caused them.

> *How am I going to handle all this equipment, understand these outlines and interpret each alarm?(H11)*
>
> *At first, in my opinion, any alarm that "sounded" was an aggravation signal on the state of the critical condition person. (F3)*

● Care towards the critical condition patient

In care towards a person, specifically during their critical condition and in the need of identifying, planning and prioritizing care or therapy preparation and other procedures, students emphasized the difficulties felt and value the availability that the tutor gives them in general, sharing knowledge and making them reflect about the reason why actions have to be developed.

Among other aspects, the nurse/patient relationship in the ICU, as well as the nursing intervention specificity, allow the student a qualified training, reflection, and fundamental:[11]

> *Caring for these sedated people who are on ventilation support, gives me an un-easy sensation [...] any mobilization may affect their hemodynamic (in) stability. Many cannot tolerate a lateral position, as the SPO2 saturations decrease. (B5)*
>
> *The presence of several central venous catheters, arterial catheter, large medication in infusion syringes obligated me to do a lot of research and made me learn the medication interactions with a different view. (G7)*
>
> *The technique executions and specific procedures, when related to patient care, applying principles that have been acquired, gave me training and a different skill during the action. (C6)*

● Care continuation

The at shift changes (at the beginning and end) is referred to as offering a great range of information that implies knowledge mobilization, the research and exercise to better capture and emit essential information.

> *Shift changes are not done in a "passive" way, there is often the presentation and clarification of doubts about the patient's situation, for example, therapy, relating it to hematology or biochemistry laboratory results, eating habits or better tolerated positions [...]. (G8)*
>
> *Care continuation becomes easier because of the registry detail in each patient's record and the information transmitted during shift changes(F2)*
>
> *The importance of the work method, the clarification of what makes up "routine" with no harm to care individualization. (C5)*

In this reflection, the student reports that interaction allows not care continuation, but also reflection by nurses about the quality of the care given, which is a competence development promoter.

Some authors refer to a set of questions that oriented their production process investigation, competence selections and transmissions, by means, where one can legitimatize a certain way of understanding care practice and by extension, the life experiences that allow the students to acquire a nurse belief system and motivational attributes.[6,15]

● Interaction with patient/Family

The relational dimension is always made more difficult by the patient's condition in a critical situation, usually sedated, in need of invasive ventilation support and a consequent commitment of the communication faculties.

> *Non-communication and non-response to stimuli from the majority of patients was one of the hardest situations that I have ever faced. (H9)*
>
> *Frowning or the frequency doing it was an more important signal, this made me exercise my sensitivity and I can see an enormous difficulty in overcoming this communication barrier. (D3)*

The therapeutic relationship, with relationship between the staff with families or significant people of the patient is developed through observation and attentive listening relative to the intervention with other professionals in the field. The registry and further reflection, inserted in the theoretically acquired knowledge, help personal development.

> *I tried to observe the relationship between the tutoring nurse and the relatives, the way they interact and the information that is transmitted. (A4)*
>
> *I have learned a lot through close observation of the nurse tutor, trying to comprehend the priorities that were defined in the patient care given. (C8)*
>
> *At first I mainly invested in observing the nurses and other professionals. (E1)*
>
> *The help/counseling form the tutoring nurse was of immense value, always present, motivational and that brought me trust and confidence. (B10)*

The interaction among several professionals as well as the student's regular presence in the middle the team favors their socialization and makes insertion easy, while facing a set of new situations that conjugate the expectation of a challenge with the fear of failure.

● Interaction and learning strategies

Competences always refer to people and they are singular constructions, inherent to each one. Because of the necessity of acting, of doing; when facing any occurrence each person has their own *operatory scheme*[2], but, just like a coin, competence holds two interconnected dimensions, the individual and the collective one, implying that each one knows how to mobilize their potential and environment.

The counseling as a reflexive practice,[18] aims to act with competence therefore suggests the interaction with others and implies actuation strategies, that the students mention, evidencing the importance given to them and which is exemplified in the following excerpts:

> *We sometimes gathered to clarify goals and discussed learning objectives in the teacher's presence. (H4)*
>
> *Importance of the work method, clarification of what constitutes "routine" with no harm to the care individualization. (E5)*
>
> *There was always something to improve, a different posture to adopt, which I forgot, always necessary to practice, repetition and counseling from the nurse tutor, always present, to gain, little by little some autonomy. (D7)*
>
> *Only now, almost finishing this clinical training period, I'm starting to feel more capable of joining the skills and performing a more efficient time management"(D9)*
>
> *[...]but, I have also had very good life experiences, the integration with this team that received me and allowed me to evolve in knowledge and as a person. (A6).*

In six of the reflections analyzed, the students describe what we consider positive and negative factors that intervened with the development of competences, reflecting on what we can consider as personal and professional development strategies that were used for overcoming difficulties and needs.

● Facing failure and death

Several situations that occur and the drama that they usually involve, strengthened by the unexpected and that present ethical decisions, bring difficulties that are intensified within the student/patient/family relationship, which has been reported to make them feel the necessity for greater preparation, dedication and attention. Confrontation with death questions the student about the value of life and changes their perception adding a stronger tonic into human condition limitations.

> *During this period there have been less good moments, caring for these patients who are so debilitated, exposed, unstable and at risk of life, made me think and rethink about my capacities to face this anguish and sense of impotence. (*A13)

The importance of the knowledge generated in the inter-subjectivity of the meanings produced and in the interactions among the individuals, takes us to a more comprehensive, holistic, unitary and integrating view.[1,3]

FINAL REMARKS

The clinical training period as a phase of the student's practical training in nursing, allows them to acquire life experience in care contexts, mobilizing and questioning the skills that base their actions and thus develop their competence construction process.

However, writing about how we act and why we did so is not easy for anybody and it requires training, much more training when we are required to center in our own performance, identifying development or constraint factors for the acquisition of expected competences.

In the analysis we emphasize that the largest registry unit frequency occurs in the cognitive dimensions, followed by the attitudinal dimension, but they are equally relevant in the relational and technical

dimensions. Several ethical situations are described by the students; nevertheless, they are not identified in this dimension's classification.

We consider this "objective" work about something subjective; as delicate and very rich, and it is an important mediation function for the teacher. It consists of helping the student to name and situate the training context action, in its overall sense, leading the narrator into implying them self in something which they are.

The tutor plays a very important role while a counselor and facilitator in a student's competence training process in a teaching clinic, comes strengthened by the valorization that the student gives to themselves, highlighting availability as an essential characteristic. We know that this orientation has to be inserted beyond this important characteristic, in a consolidated pedagogic practice, attended, that requires training meeting time for the whole team involved.

What we believe that worrying is very pertinent about understanding how we learn and explain the skills implied in the interventions and care that we perform.

REFERENCES

1. Benner P. From novice to expert: excellence and power in clinical nursing practice. California: Addison-Wesley; 1984.

2. Le Boterf G. Construir as competências individuais e colectivas. Porto: Edições ASA; 2005.

3. Canário R. Formação e mudança no campo da saúde. In Canário R. (org). Formação e situações de trabalho. Porto: Porto Editora; 2001.

4. Correia MC. A Construção do Currículo no Ensino de Enfermagem: um estudo de caso. Loures: Lusociência – Edições Técnicas e Científicas Lda; 2004.

5. Correia MC. A reflexão critica como prática formativa. Sinais Vitais. 2002; 42:60-3.

6. Cowan DT, Norman I, Coopamah VP. Competence in Nursing Pratice: a controversial concept – a focused review of literature. Nurse Educ Today. 2005; 25(5):355-62.

7. Ceitil, M. Sociedade, gestão e competências. Lisboa: Edições Sílabo. 2004.

8. Barreto V, Aguiar B, Tonini T. Necessary capabilities approach to the nurse from intensive therapy: literary review study. Rev enferm UFPE on line [Internet]. 2009 July [cited 2011 Feb 10]; 3:238-45. Available from: http://www.ufpe.br/revistaenfermagem/index.php/revista/article/view/179/179

9. Bradshaw A. Defining "competency" in nursing (part I): a policy review. J Clin Nur. 1997; 6(5):347-54.

10. Ordem dos Enfermeiros. Competências dos enfermeiros de cuidados gerais. [Internet]. Lisboa. [updated 2010 Mar 12; cited 2011 Mar 7]. Available from: http://www.ordemenfermeiros.pt/publicacoes/Documents/CompetenciasEnfCG.

11. Lino MM, Calil AM. O ensino de cuidados críticos/intensivos na formação do enfermeiro: momento para reflexão. Rev Esc Enferm USP. 2008; 42(4):777-83.

12. Moya JLM, Siilvana CP. La ensenãnza de la enfermaria como uma prática reflexiva. Texto&Contexto – Enfemagem. 15(2): 2006.

13. Pereira F, Costa V, Hammerschmidt K. Nursing care to patients in emergency hospital: expectations and challenges for the undergraduate nursing student. Rev Enferm UFPE on line [Internet]. 2010 Mar [cited 2011 Feb 15];4:915-23. Available from: http://www.ufpe.br/revistaenfermagem/index.php/revista/article/view/864

14. Carvalhal R. Parcerias na Formação. Papel dos orientadores clínicos. Loures: Lusociência – Edições Técnicas e Científicas Lda.; 2002.

15. Tanji S, Silva C, Viana L, Santos N. The learning scenarios about the nursing knowledge production. Rev enferm UFPE on line [Internet]. 2009 July [cited 2011 Feb 10];3:160-6. Available from: http://www.ufpe.br/revistaenfermagem/index.php/revista/article/view/169/169

16. Strauss A, Corbin J. Basics of qualitative research.Newburry Park: Sage; 1990.

17. Wilkin, K. The meaning of caring in the practice of intensive care nursing. Br J of Nurs. 2003;12(20):1178-85.

18. Schon DA. Le praticien réflexif: a la recherche du savoir cache dans l'agir professionnel. Paris: Les Editions Logiques; 1994.

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Corresponding Address

Maria da Conceição Batista Correia
Escola Superior de Saúde
Rua Dr. José Correia Maltez, 7800-111
Beja, Portugal

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