http://dx.doi.org/10.1590/0104-07072014003780012

PRACTICES OF INTENSIVE CARE NURSES IN THE FACE OF TECHNOLOGIES: ANALYSIS IN THE LIGHT OF SOCIAL REPRESENTATIONS[1]

Rafael Celestino da Silva[2], Márcia de Assunção Ferreira[3], Thémis Apostolidis[4]

[1] Excerpt from the dissertation – Intensive care styles in the face of Technologies: a contribution to the nursing care clinic, defended in the Graduate Nursing Program at *Escola de Enfermagem Anna Nery* (EEAN), *Universidade Federal do Rio de Janeiro* (UFRJ), in 2012.

[2] Ph.D. in Nursing. Adjunct Professor, Fundamental Nursing Department (DEF), EEAN/UFRJ. Rio de Janeiro (UFRJ). Rio de Janeiro, Brazil. E-mail: rafaenfer@yahoo.com.br

[3] Ph.D. in Nursing. Full Professor, DEF/EEAN/UFRJ. CNPq researcher. Rio de Janeiro, Brazil. E-mail: marciadeaf@ibest.com.br

[4] Professor, Université de Provence Aix-Marseille. Director of the Social Psychology Laboratory. Aix-en-Provence, France. E-mail: themistoklis.apostolidis@univ-amu.fr

ABSTRACT: The aim was to analyze the social representations of nurses´ care practices in the face of the technologies applied to the clients hospitalized in intensive therapy. Qualitative field research in the framework of the social representations theory. Semi-structured interviews were held with 21 nurses of an intensive therapy unit at a public hospital in Rio de Janeiro. Thematic content analyses were applied, which showed that the technologies are devices that translate the signs from the client's body, which nurses base themselves on for care. The ways of assisting indicate bureaucratic and care actions demanded by the technologies, which imply detachment from and proximity to the client. It was concluded that there is an idealized image of the intensive therapy client linked to the technologies, organized in the professional training and supported by the clinic practice of the intensive therapy unit.

KEYWORDS: Nursing. Psychology, social. Nursing care. Biomedical technology. Intensive Care Units.

PRÁTICAS DE CUIDADO DOS ENFERMEIROS INTENSIVISTAS FACE ÀS TECNOLOGIAS: ANÁLISE À LUZ DAS REPRESENTAÇÕES SOCIAIS

RESUMO: Objetivou-se analisar as representações sociais das práticas de cuidado dos enfermeiros em face das tecnologias aplicadas ao cliente hospitalizado na terapia intensiva. Pesquisa de campo, qualitativa, cujo referencial foi a teoria das representações sociais. Realizou-se entrevista semiestruturada com 21 enfermeiros de uma unidade de terapia intensiva, de um hospital público do Rio de Janeiro. Aplicou-se análise de conteúdo temática, que evidenciou as tecnologias como dispositivos tradutores dos sinais do corpo do cliente, nas quais os enfermeiros se apoiam para cuidar. As formas de assistir denotam ações burocráticas e de cuidado, demandadas pelas tecnologias, que implicam o distanciamento e a proximidade do cliente. Concluiu-se que há uma imagem idealizada do cliente de terapia intensiva ligada às tecnologias, organizada na formação profissional e sustentada na prática clínica da unidade de terapia intensiva.

PALAVRAS CHAVE: Enfermagem. Psicologia social. Cuidados de enfermagem. Tecnologia biomédica. Unidades de Terapia Intensiva.

PRÁCTICAS DE ATENCIÓN DE LOS ENFERMEROS DE TERAPIA INTENSIVA FRENTE A LAS TECNOLOGÍAS: ANÁLISIS A LA LUZ DE LAS REPRESENTACIONES SOCIALES

RESUMEN: Se objetivó analizar las representaciones sociales de las prácticas de atención de los enfermeros frente a las tecnologías aplicadas al cliente hospitalizado en la terapia intensiva. Investigación de campo, cualitativa, cuyo referencial fue la teoría de las representaciones sociales. Se realizó entrevista semi-estructurada con 21 enfermeros de una unidad de terapia intensiva, de un hospital público de Río de Janeiro. Se aplicó análisis de contenido temático, la cual evidenció que las tecnologías son dispositivos traductores de los señales del cuerpo del cliente, en las cuales los enfermeros se apoyan para cuidar. Las maneras de asistir denotan acciones burocráticas y de atención demandadas por las tecnologías, que implican en el distanciamiento y en la proximidad del cliente. Se concluye que hay una imagen idealizada del cliente de la terapia intensiva que se relaciona a las tecnologías, organizada en la formación profesional y sustentada en la práctica clínica de la unidad de terapia intensiva.

PALABRAS CLAVE: Enfermería. Psicología social. Atención de enfermería. Tecnología biomédica. Unidades de Terapia Intensiva.

INTRODUCTION

Intensive Therapy (IT) nursing care practices emerge as technologies, to the extent that they involve knowledge and its application in the mastery of the machines. These practices, in turn, also include elements of human care, as care is expressed at the moment of the meeting, intermediated by the machines.

In the case of its technological dimension, it is highlighted that the use of these resources can put the clients at risk if they are not correctly "guarded". Hence, the machine needs to be "assisted" to maintain the clients' lives. This care implies technical knowledge, which permits grounding the actions in view of the technologies.[1]

The use of technological devices, which facilitate care delivery to critical clients and demand caution in order to guarantee the reliability of the data, should not invalidate an understanding of nursing care, considering technology use as a human action.[1] Although the machines are expressed as objective values, they should be complemented by values related to human subjectivity.

The results of IT research, which invest in the study of this theme, have alerted to the characterization of lines of action, which are developed in the face of the technologies. Sometimes they underline the existence of less recognition for the expressive aspects, highlighting the need for clients to experience even care delivered with the help of apparatuses as a technical and sensitive actions; other times, they demonstrate errors in the professionals' management of the technology, in the attempt to minimize the risks for the population.[1-3]

There are also signs that the technology guides the establishment on care styles in nursing, like in the case of care and technological action. Technological care is marked by nurses' application of greater knowledge, which drives their care in the search for objective and subjective data from the clients, as well as objective data coming from the machines. In the technological action, care is based on information deriving from the apparels, without considering the clients' data. Hence, the professionals let themselves be conducted by the machines only, without any interlocution with the client.[4]

In addition, the capitalist interests in health are linked to the technological incorporation in service production. The positive value of the technology is stimulated through marketing strategies, which are internalized in the individuals during their socialization. This legitimation of the technology influences health care.

Because of their attributes, mainly because they are intermediated by machines, the requisites of nursing care practices in IT arouse dialogues among the nurses, which produce distinguishes meanings for the clients. They depart from the principle that these practices are important for these subjects, pervading their daily life, producing information about the client management, the nurses' participation and the application of care strategies. This represents a socially relevant object, producing changes in these individuals' pattern of behavior, helping them to find their way in this reality.[5]

The imaginary that circulates in the professional context regarding the figure of the IT nurses and their modes of action, the relation they establish with the technology, together with the idea of complexity attributed to intensive nursing care, are different dimensions that make the care practices in this universe matter to the nurses who interrelate with them, integrating their thoughts and, in the end, serving as an object of Social Representation (SR). In that sense, the following question emerges: what contents integrate the SR of the care practices of nurses working in IT? The objective in this research is to analyze the SR of nurses' care practices in the face of the technologies applied to clients hospitalized at the it.

The SR constitute a socially shared interpretation system, which guides the group's behavior towards a phenomenon. Identifying how the representations about the care practices are elaborated, constituted and organized contributes to understand the nurses' care styles. This enhances the discussions about the care processes in IT, revealing to what extent the care model, professional education, public policies, the institutional context influence the care practice, encouraging propositions and interventions, with a view to the quality of nursing care in this scenario, which justifies the accomplishment of this research.

METHOD

Qualitative field research with the application of the process-based Theory of Social Representations (TSR).[5]As a theory of social knowledge, the studies that apply it invest in clarifying the

contents of that knowledge, which constitute representations on a given object. The representation is a structure that mediates the relation between the subject-other, subject-object, through communicative action. The communicative work of representation creates symbols that give meaning, that is, they put something in the place of something, promoting a symbolical dislocation.[6] In the face of the technological advances in health and their repercussions for nurses' daily work in IT, mainly about the knowledge, the care practices in this place are a focus of communicative action. They are part of the nurses' conversations, arousing reflections and debates, leading to a cognitive elaboration, based on which these professionals pre-code their reality, granting their own logic and meaning to the actions, which are not only built based on reified knowledge.

The scenario was a federal hospital in the city of Rio de Janeiro, and the field with the Intensive Care Unit (ITU), with a ten-bed capacity and high demand, as the institution is considered an emergency door, whose patients require high-complexity clinical and technological care. The team is multiprofessional and the nurses work on a scale of 12 by 60 hours, with a mean two to three nurses and five to six nursing technicians per shift. Among the 24 nurses in this sector, 21 participated in the research, including 17 women and four men, who complied with the inclusion criteria: being an ITU nurse, working in direct care during the research period.

These data were produced through individual interviews based on a semi-structured interview script. The research undertook an initial period to explore the field, to get in touch with the reality and invite the nurses to participate. On average, the interviews took one hour and thirty minutes and were held in the afternoon, in a private room inside the sector.

Thematic content analysis was applied, identifying the units of meaning organized around large themes.[7] Counting rules were applied to screen the testimonies, looking for the occurrence and co-occurrence of the themes that translated the meanings of the discourse. The categories were established by classifying the elements that were part of a thematic group, initially through distinction, followed by analogy-based regrouping, according to the semantic criterion. The analytic treatment of the material was based on the mapping of the contents, per mile.[7] The categories and subcategories were defined in the light of the expressed and latent contents of the discourse.

The junction of the themes in the categories structured two guiding axes of the analyses, the first of which was called "The nurse and dealing with the technologies in it care practices" and the second, "Forms of attending to clients in IT". These axes were interpreted in the light of the SRT, attempting to picture how the representation is constructed, its genesis, elaboration process and constituent aspects.

The project received approval from the Ethics Committee at the hospital where the study was carried out under protocol 35/10. The subjects were asked to voluntarily participate through the signing of the Informed Consent Term. Data were collected between November 2010 and May 2011.

RESULTS

The nurse and dealing with the technologies in Intensive Therapy care practices

The use of technological resources in IT nursing care entails positive and negative effects. The positive side of technology use occurred 18 times in the analysis corpus, which were mainly related to the direct impact of incorporating these instruments in the professional actions. These benefits include the supply of more qualified information to the nurses, which will allow them to guide their conducts, a recurrent theme in 10 out of 18 recording units (RU).

I think it influences in the sense of you having an actually more focused look in your assessment of your patient. We start to evaluate that patient and soon look at the monitor, and we already have a kind of picture of how this client is doing (Nurse 8).

It will tell how I need to act, what I have to do, if it is showing me that something is not normal and through my knowledge I see that it is not normal, I will act in a certain way to solve or minimize the problem (Nurse 9).

One of the processes that contributes to the elaboration of the SR on a phenomenon is objectification, an operation of the imaginary, through which the individual concretizes and structures the knowledge related to the object of the representation.[5] Therefore, images are used to make the abstract notions concrete. The RU of the technologies give examples of objectifications, referring to them as a picture or device that translates the

client's body, showing something about him to the professional. Such images anchor the technology in the function of a camera, materializing and making the disease visible.

At the opposite end, however, there is the negative influence of the technology, a theme nine nurses mentioned, seven of which co-occurred with the positive influence. The negative assessment is based on the fact that it makes the professional dependent on the information the machine sends, so that they gradually take distance from the client and prioritizes the data coded by the apparel.

The influence we see with regard to the machines, the creation of dependence by some nurses for care, so, the guy, he is limited to just observe there what is on the monitor or the respirator and, sometimes, what is missing is that the nurses go to the patient's bedside, auscultate, touch the patient, see what is happening to him [...] *they cannot turn into a walker* (Nurse 21).

In this RU, the objectification process is identified in comparing the technology to a walker, an object constituted by a hollow back, which crippled people rest their armpits on in order to move. The walker symbolically expresses the help for a disabled person, permitting the complementation of what is missing. In this case, the nurses rest on the technology to complement their absence from the bedside, minimizing their insufficiencies.

This co-occurrence of positive and negative shows the ambivalent nature of the technologies by simultaneously joining two opposite aspects, when considered in the context of nursing practices. The technology is as it were intensely loaded from an emotional viewpoint as, when the professionals discuss it in their different activity areas, especially in IT, it is a frequent source of discussions, making them attribute positive and negative assessment to its use, which guide their behaviors towards them.

In the light of the data, it is evidenced that, based on how the professionals integrative the technological devices in their daily practice, these can exert a positive or negative influence in the care context, arousing considerations on how they deal with the technologies.

In this perspective, related to the analysis, this theme emerges in the material, expressed through the idea of appropriate/inappropriate use of the technologies related to the group of nurses who is part of the IT, including 19 RUs. Thus, initially, the group that uses the technology in accordance with colleagues in the area stands out, granting it appropriate importance, with 14 hits.

My colleagues are very good in this part too. They use it the same way as I do, they see it the same way as I too, it is impossible not to do so (Nurse 3).

The other part is represented by two opposites, on the one hand the nurses who discard the application of this type of support, and on the other those who guide their planning mainly based on the signs these technologies produce, totaling 10 hits.

She exclusively rests on the technology, forgetting about what the clinic is showing. She departs from the principle that, if it isn't showing that, what the patient says is of no value[...]. *For some people the technology is of no use, it's not the final point* (Nurse 2).

Some people are averse to this technology, they don't like to deal with it, and some really don't know [...] *some people find it difficult to deal with new equipment, some see the technology as the professional taking distance* (Nurse 7).

This way in which the technologies are used daily stands out for the subjects, being present in 17 out of 21 RUs. Hence, when discussed from this perspective, nuances in their care routine are highlighted, clearly picturing this implementation. That is what happens during techniques like the bed bath, in which the professionals prefer to replace the technology by their assessment, giving it a secondary role.

The ideal would be for you to keep the patient on the monitor, to give you data while you are moving him, because there may be problems that go by unnoticed. The proximity will minimize that, you are watching, looking if a breathing pattern will change, if the patient has a cyanosis that wasn't there before (Nurse 21).

As identified, part of the team's lack of technical-scientific training to manage the equipment and interpret its signs interferes in the correct use of these technologies, which can hamper the client's recovery.

Not all of them are prepared and trained to deal with all kinds of equipment we have, there are employees who have worked here longer, without recycling (Nurse 7).

Another interesting point is that the habitual contact with clinical cases, which demand care technologies, turn these devices into a natural part of nursing care and, in that sense, as they frequently deal with this information modality, the professionals get accustomed to it. This fact represents a risk as, if this happens, they may un-

derestimate these data, increasing the chances of a clinical complication. A typical example happens with care with the alarms linked to the machines.

Inside the ITU, sometimes, people accept this technology, which entails two aspects: the practicality, the optimization but, on the other hand, people end up accommodating, because everything is there really easy, and they end up getting accustomed to that information, sounds and alarms. We have to stop a little and really oblige ourselves to be attentive because, sometimes, we catch ourselves doing something for a long time without even looking at the monitor (Nurse 8).

One of the functions of the SR is the appropriation of what is new or unknown, allowing the subject to get familiar with that odd object, so as to deal with it. Nurse eight reveals that the technology has turned into a prosthesis that is part of the client's body. So, in this case, the nurse already considers the technology as something natural, which causes no estrangement, so that she does not pay attention to the information it sends. Thus, the representation loses its function, as representations last while they circulate and are useful, losing its effectiveness and entailing risks for the client.

The understanding about this theme, which includes the types of nursing activities in view of the technology in their daily practice, can be complemented by an aspect present in 17 RU, which is the interaction with the clients, through which information is captured to attend to their holistic needs. In this respect, two characteristics stand out: one is based on the justification that, at the ITU, the priority is to see to the most severe patients, valuing the related objective data, and therefore devaluating the situations that involve a deeper interaction. This aspect was more present in the testimonies of younger nurses who had graduated more recently, arousing conjectures that this conception may have been organized since their academic education.

Some nurses, when elaborating a scale, ask not to work with lucid and oriented patients [...] *now the objective issue, the palpable issue is important at the ITU, that is the differential at the ITU and will continue being forever, the subjective at the ITU will always be treated as something secondary to the main element, the technological care directed at clear, solid evidence, you cannot escape from that, because our intensive therapy education is focused on evidence* (Nurse 15).

It is underlined that, in this scenario, the nurses are confronted with many administrative demands. Thus, as they have many bureaucratic routines to comply with, they start interacting with clients punctually or superficially, as the execution of these activities occupies a distinguished place in a ranking of importance when compared to interaction with the client. This is evidenced in the nurses' testimonies from the day shift.

The most awake is the least observed, we like more sedated, more severe patients and, when we visit that patient, we end up not talking further, about the family, something that can offer data for our diagnosis. As he is clinically well, I end up going to other things to do, I go back to the bureaucracy because I have five hundred million things to do, you can't stay at the bedside, listening to all the stories he has to tell. The patient is examined, but he is not the apple of the eyes (Nurse 6).

The patient is objectified by Nurse 6 in Portuguese as the "girl of the eyes". This expression refers to the pupil, a term originating in the Latin word *pupilla,* which means little girl, part of the eye (orifice) responsible for the passage of light from the external midst to the sensory organs of the retina, important for sight. The analogy between the critical patient and the girl of the eyes grants it a bias of preciousness in IT, as the pupil is for sight, deserving special attention from the nurses.

Forms of attending to clients in Intensive Therapy

Based on these preliminary results and considering the search for themes to organize the empirical categories, other elements are transmitted, beyond this interface between the nurse and the technology, which contribute to the configuration of the care styles and which are reproduced in daily care in that context. When discussing their practice, the nurses distinguish two lines of action with regard to client care, one of which is defined as bureaucratic and the other as care-related, which relate to a sense of proximity or distancing from the client. The bureaucratic bias is more focused on management and administrative tasks, while the care-related bias is centered on direct client care. This dialectic relation between the bureaucratic and the care-related is present in 13 RUs.

We have many clinical nurses, who like delivering care, being at the bedside. People who get close to the patients, who truly take care of the patients as a whole [...] *but I've got many nurses who are more bureaucratic, whom I perceive are not committed to nursing care yet* [...] *the others deliver care, but more*

indirectly and, when they go to the patients, they do what they have to do and, when that task is done, they take distance and will only come again in an extreme case, when highly requested, you see? [...] *there are some nurses who, when the monitor goes off, the patient is losing oxygen and they are incapable of going there and aspirating the patient* (Nurse 13).

Even when referring to the clinical nurses, the narratives signal the differences between them in terms of levels of participation, demonstrating the existence of more punctual care.

There are nurses and nurses. Some nurses are more bureaucratic, they go and sit in the chair, they are only interested in files, books, psychotropic drug control. In terms of care, they are not even interested in the patient. Others like care more but, even in care, there is a difference. Some think it's just the bath, that punctual thing and that's it.Others no, they are very detailed (Nurse 1).

In the result, a professional quality is also outlined which influences their behavior towards the activities that are to be performed. In ten testimonies, the committed and non-committed professionals are emphasized, showing the nurses' attitude towards the clinical situations they are confronted with in practice. This attitude indicates the importance attributed to the components of care and their implications for the events in this scenario.

You see that the person stays from up there, you do everything from up there, you don't get into the beds. Just like you have other nurses who are extremely dedicated who if necessary spend the day there giving care, at the patient's side [...] *there are nurses, the team in general, who are committed, responsible, accountable for the service* (Nurse 16).

The patient had his abdomen full of fluid, so he couldn't breathe better. So I detected it, they said: 'how did you do that?' Look at the patient [...] *some nurses work at two, three place, they're there to get money* [...] *some nurses see things and pretend not to see them, it's easier for them* (Nurse 14).

With six hits in the corpus, the involvement with the client, mentioned by the women, appears as another characteristics of the professionals' action perspective. This means saying that, for them, besides the clinical information based on the health-disease process, the clients' experience matters, situated in their life context, related to the disease. In that sense, the dialogue with the patients and families is valued, with a view to apprehending the demands that require interventions, approximating a holistic care practice.

Some people are drier, they establish a more professional relation with the patient. Some people, as I've heard here: 'ah, don't put me with awake patients, I prefer sedated patients'. There are people who, sometimes, do not value some feelings of the patients, they do not find some feelings important or trivialize them, if the patient is depressive, if he's complaining, tearful (Nurse 8).

DISCUSSION

The analysis of the care practice and the elements of the nurses' work process in intensive therapy have been the target of discussions to try and understand how the care actions take place in the daily reality of these sectors.[8-10] The authors confirm the need for debate on how to practice nursing care in IT. By unveiling the meanings present in the forms of thinking and practicing care at a cardiology ITU, it is indicated that, although the professionals use systemized planning, its implementation is based on the clients' clinical situations, attempting to attend to their biological needs.[8] In this care process, they use electric, electronic and computerized instruments, are concerned with enabling procedures focused on the clinical evolution, getting tied up in an instrumental daily routine, which hampers their approximation to the care subject, which only happens punctually. Therefore, the distance between the rhetoric and the real is enhanced, mainly marked by the non-attendance of the dimensions of human needs and the focus on the clinical protocols and management activities.[8]

These considerations are complemented by the research that was aimed at revealing the contradictions in care delivery at the ITU.[9] Thus, the nurses' discourse transmits the idea of holistic care, in which they not only pay attention to the clients' clinical aspects, but also attempt to respond to theirs and their family's psycho-emotional demands.[9] On the whole, however, their work process at the ITU indicates a dissociation, as it evidences that, although they sometimes value the companions and patients' physical/mental suffering, the intersubjective context is not deepened in the care relation. This means saying that that the interaction is characterized as superficial, complying with bureaucratic routines that contribute to a distancing between them.[9]

These studies are aligned with another international study,[11] which was focused on the understanding of how the nurses collect infor-

mation during their systematic observation of the person receiving care, the medical equipment that person is using and the treatments they are being administered, so that these professionals can formulate a diagnosis and make a decision. That exploratory study showed that, as opposed to what happens with the documents prescribing this activity, essentially organized by their reference to the physiological systems, there is a relative variation in the elements the nurses consider in the situation, in the contact with the client. Hence, collecting information in a real situation should not be based on the *a priori* representation of the task, but on the nurses' cognitive functioning in a real situation, including the different aspects involved in patient care.[11]

These elements indicated by the authors at the interface with the study results highlighted indicate that, in the practice context, a care ritual takes place, which gains meaning when the nurse figures in a biomedical care reference framework. This surrounds an environment permeated by the disease burden, with the predominance of therapeutic instruments, exerting "force" on the professionals in their elaboration of the practice. This ritualized behavior, identified through the implemented routines and repetitions, expresses the symbolic and affective values invested, which underlie the why of the SR, permitting the mapping of the logic that drives the action perspective that is adopted.[6]

Based on the data in this study, the constitution of a care ritual appears which expresses the symbolic dimension of SR about the care practice in IT, with a type of care that, intermediated by clinical knowledge, values the evidence and objective data, as well as all activities directly aimed at the clients' recovery, which is the case of bureaucratic tasks, mainly regarding medication therapy. This activity is prioritized, as well as everything that can facilitate its accomplishment (like removing the monitors for bathing for example), making the nurses act according to protocol.

Consequently, in this model, the interaction with the client is strictly clinical, and patients who are awake and demand more in-depth interaction do not fit into this logic, and are sometimes classified as "complaining", or make the nurses "lose their patience", as they are unable to listen to the stories they have to tell, as evidenced in one of the RUs taken from the testimony of Nurse 6.

The discussion about the care practice for IT clients also takes place in the academic sphere, mainly related to education and competency building, in response to the requirements of professional practice in this context, in view of the changes in the Brazilian morbidity and mortality profile. The education should cover aspects of the health-disease process, ethical-legal, social and humanitarian aspects. Nevertheless, the regulatory documents supporting this education process define care delivery to critical patients as "severe patients with problems in one or more physiological systems, with a loss of self-regulation, in need of artificial replacement of functions and continuing care".[12:3]

Specifically with regard to nursing education, it is highlighted that it should include: "besides the contents about the disequilibria in organic functions, strategies to facilitate competency building, at the practical level, which permit the systematic, interpretative, evolutionary and articulated assessment, aiming to acknowledge actual or potential situations of clinical deterioration, the early intervention of effective intervention and the assessment of the responses to these interventions".[13:180]

Despite acknowledging the multiple dimensions of this interdisciplinary care level, nursing education to act in this area seems to prioritize the clients' severity and recovery through clinical nursing actions in the identification of problems. These characteristics, present in the regulatory documents, are outlined in the academic experiences, as witnessed in the content analysis of the data, when one of the participants affirms that, since her student times, she preferred taking care of more severe patients than patients demanding "less care". This, in turn, illustrates how the circulation of information in the social group creates standards that serve as a reference for the group members, that is, the shared knowledge provides the participants with standards, regulations and behavioral patterns that contribute to their belonging.

In addition, studies that discuss the professional profile and competences for ITU work in further detail are in accordance with these assertions. In a review about the professional competences necessary for nurses who work in ITU, communication with clients and family members figures timidly amongst all other elements, as these carry a clinical meaning focused on the clients' improvement, through the access to certain professional qualities, mainly in the technical-scientific sense.[14]

The research results, articulated with evidence from the literature, lead to the understanding that the nurses' SR about their care practices, in the face of the technologies, are linked to the image of the ITU patient, which has been elaborated since academic education. This image rests on the principle of severity/recovery, which organizes a type-figure of ITU patient, objectified in the expression "girl of the eyes", which indicates that the ideal patient is the recoverable severe/sedated/intubated.

Particularly this result discloses the normative dimension of the SR, which function as group standards, modulating a certain social object, that is, setting the priorities it should have in this group in order to be recognized as such.[15] On the other hand, these same group standards produce rules of conduct, prescribing common, hardly probable and unacceptable behaviors. Thus, the IT nurses, in defining a type-figure of the patient, reaffirm what they see as the focus of care in that sector, resulting in the constitution of a series of behaviors perceived as common (use of technology and objective data) or hardly probable (deepened interaction), which characterize the dynamics of care in this context.

In parallel with this element of the SR of practice, there is the debate about the ITU as a field of knowledge and practices. Thus, IT figures as an established discipline, converging with the prestige of medical science, involving the advent of the technobiomedical industry, based on theoretical premises of positivism. This is related to an entire objectified model, subdivided and explained by different areas of knowledge which, today, is legitimized by the incorporation of new technologies that strengthen the notion of evidence and, consequently, entail implications for professional education, like in the case of nurses,[3] prioritizing the clients' severity and clinical recovery.

A classical study of SR, developed with nurses in France, contributes to understand how these professionals represent their own function, revealing the motives that explain the dynamics of their work process.[16] In that study, two groups were investigated: one in which the subjects were regularly stimulated to play their own role, applying their own knowledge with true autonomy, which made them implement new practices; and another in which the subjects performed their function more traditionally, in which the nurse executed the actions the physician prescribed.

In the individuals marked by traditional practices, the prescribed role has an important place in the representation and is part of some prescriptions of the own role. On the other hand, when the new practices are more frequent, the prescriptions related to the own role stand out in the representational field. These results contribute to the establishment of the links the nurses construct in the arrangement of the care practices.[16]

In the analysis of the results, this influence from an objectified model based on medical science is pictured when the interviewees discuss the role of technology, which functions as a "camera" that produces, through clinical codes, an objective picture of the client's body, necessary to direct the actions. In many cases, this explains the dependence the nurses create around them, who use it, as Nurse 21 metaphorically says, as a "walker" that replaces her absence at the bedside to collect and integrate data about the client.

The social thickness of technology is also perceived when the nurses discuss its positive and negative effects. This refers to the dimension of affections in SR, which contribute to their elaboration, as the object provokes the subjects so that they find themselves impelled to talk, in order to participate in the conversations and feel included.[17] In this respect, there are frequent concerns with the repercussions of technology today, focusing on the need for a moral investigation in the technologically mediated ITU context as, when the nurses apply the technology to interpret and assess the clinical results, a distance is produced that places them in positions of power, with epistemic authority, constraining the patients.[18] Finally, in the light of the results, when the client is reestablished through the use of the technologies, the product of the work is reflected in the image of the nurse at the ITU, who gains admiration for her distinguished preparation, ratifying the common sense, which is shared by the intensive care nurses.

FINAL CONSIDERATIONS

The contents of IT nurses' SR about their care practice revealed the constituent elements that constitute, at the same time, the professionals' action perspective. The subjects' elaborations about this phenomenon are marked by their care styles, which are constructed in the light of the idealized image of a patient, linked to the technology, organized in professional education and sustained in clinical IT practice.

This idealized image defines a type-figure of IT client, who demands the use of technologies to translate his body's reactions into objective data, as this client is not expected to be communicative. Therefore, the nurse-client interaction is a hardly expected expression in IT nursing care.

In the formation process of these SR, images are observed that objectify and anchor the technology, making it concrete and explain its daily functionality, such as: picture (camera), device that translates the body, walker, prosthesis, girl of the eyes, which highlight the protagonist role of technology in care for a typical IT patient. In this perspective, the nurses pre-code their daily reality, determining a set of anticipations and expectations with regard to the technology, which functions as a socially shared system of interpretation and guides the group behaviors: sometimes distancing from, sometimes approximation with the client.

This study arouses actions to guide nursing education, mainly in the reflection of the theoretical and philosophical frameworks that guide it, as the typical representation of the client gives rise to a disintegrated care model that is centered on the objective disease and its clinical evidence. In practice, the reflections aroused in this research can support the subjects' reinterpretation of this reality, mainly regarding the ideas linked to the patient, attributing a new meaning to the nursing care they deserve and receive.

Concerning the limits, it is acknowledged that the presented data are linked to the study context and cannot be generalized, as the SR are connected with the groups that built them. In that sense, other studies in IT contexts, at public and private institutions, will permit a larger number of participants, with more comprehensive results, more parameters for comparison, permitting the exploration of other branches.

REFERENCES

1. Silva RCL, Kaczmarkiewicz CC, Cunha JJSA, Meira IC, Figueiredo NMA, Porto IS. O significado da tecnologia no pós-operatório imediato de cirurgia cardíaca. Rev SOCERJ. 2009 Jul-Ago; 22(4):210-8.
2. Pols J, Moser I. Cold technologies versus warm care? On affective and social relations with and through care technologies. Alter. 2009 Mar; (3):159-78.
3. Vargas MAO, Ramos FRS. Tecnobiomedicina: implicações naquilo e daquilo que a enfermagem faz em terapia intensiva. Texto Contexto Enferm [online]. 2008 Jan-Mar [acesso 2008 Jun 13]; 17(1): Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-07072008000100019&lng=pt
4. Silva RC, Ferreira MA. A dimensão da ação nas representações sociais da tecnologia no cuidado de enfermagem. Esc Anna Nery. 2011 Jan-Mar; 15(1):140-8.
5. Jodelet D. Representações Sociais: um domínio em expansão. Tradução Lilian Ulup. In: Jodelet D, organizadora. As representações sociais. Rio de Janeiro (RJ): EdUERJ; 2001. p. 17-44.
6. Jovchelovitch S. Os contextos do saber-representações, comunidade e cultura. Petrópolis (RJ): Vozes; 2008.
7. Bardin L. Análise de conteúdo. Lisboa (PT): Edições 70; 2007.
8. Silva LF, Damasceno MMC. Modos de dizer e fazer o cuidado de enfermagem em terapia intensiva cardiológica: reflexões para a prática. Texto Contexto Enferm. 2005 Abr-Jun; 14(2):258-65.
9. Pinho LB, Santos SMA. Dialética do cuidado humanizado na Unidade de Terapia Intensiva: contradições entre o discurso e a prática profissional do enfermeiro. Rev Esc Enferm USP. 2008 Mar; 42(1):66-72.
10. Oliveira BRG, Lopes TA, Vieira CS, Collet N. O processo de trabalho da equipe de enfermagem na UTI neonatal e o cuidar humanizado. Texto Contexto Enferm. 2006; 15(Esp):105-13.
11. Terraneo F, Seferdjeli L, Diby M. Le tour de lit aux soins intensifs: representations et prise d'information. Trav Humain. 2010 Oct; 73(4):339-59.
12. Ministério da Saúde (BR). Agência Nacional de Vigilância Sanitária. Consulta Pública n. 21, de 27 de abril de 2006- Anexo. Minuta de Resolução que define o regulamento técnico para funcionamento de serviços de atenção ao paciente crítico e potencialmente crítico. [acesso 28 Ago 2012]. Disponível em: http://www4.anvisa.gov.br/base/visadoc/CP/CP%5B14558-1-0%5D.PDF
13. Lino MM, Calil AM. O ensino de cuidados críticos/intensivos na formação do enfermeiro: momento para reflexão. Rev Esc Enferm USP. 2008 Dez; 42(4):777-83.
14. Camelo SHH. Competência profissional do enfermeiro para atuar em Unidades de Terapia Intensiva: uma revisão integrativa. Rev Latino-Am Enferm. 2012 Jan-Fev; 20(1):192-200.
15. Campos PHF. As representações sociais como forma de resistência ao conhecimento científico. In: Oliveira DC, Campos PHF, organizadores. Representações sociais: uma teoria sem fronteiras. Rio de Janeiro (RJ): Museu da República; 2005. p.85-98.
16. Abric-JC. Pratiques sociales et représentations. Paris (FR): Presses Universitaires de France; 2011.

17. Arruda A. Meandros da teoria: a dimensão afetiva das representações sociais. In: Almeida AMO, Jodelet D, organizadores. Interdisciplinaridade e diversidade de paradigmas. Brasília (DF): Thesaurus; 2009. p. 83-102.

18. O'Keefe-McCarthy S. Technologically mediated nursing care: the impact on moral agency. Nurs Ethics. 2009 Nov; 16(6):786-96.

Correspondence: Rafael Celestino da Silva
Avenida Nossa Senhora de Copacabana, 1181, ap. 504
22070-010 – Copacabana, RJ, Brazil
E-mail: rafaenfer@yahoo.com.br

Received: November 20, 2012
Approved: March 23, 2014