The work of the intensive care nurse: a study on the social representations structure*

ABSTRACT
This study aims at characterizing the social representations of the nurse in the intensive care unit (ICU) by identifying the central core and the peripheral system. It was carried out in five ICUs from both public and philanthropic teaching, research and assistance hospitals in Salvador (Bahia, Brazil). Data were gathered from ninety nurses by means of free evocation from the phrase: nurse’s work in an ICU and then processed with the EVOC software. Analysis was performed by building a four-digit chart based on the structural approach to the theory of social representations. Results point out stress, responsibility, integral care and gratification as the core elements. The peripheral system comprised personal and professional attitudes deemed necessary to perform the work. Therefore, it could be concluded that stress and responsible work are relieved by the gratifying feeling of providing integral care, which demands a range of personal and professional attitudes.

RESUMO
Buscou-se caracterizar as representações sociais do trabalho da enfermeira em unidade de tratamento intensivo (UTI) mediante a determinação do núcleo central e do sistema periférico. Foi realizado em cinco UTIs de dois hospitais de ensino, pesquisa e assistência, sendo um público e outro filantrópico da cidade de Salvador-Bahia. A coleta de dados foi efetivada pela associação livre de palavras ao termo induutor: trabalho da enfermeira em UTI com noventa enfermeiras. Os dados foram processados pelo software EVOC e analisados por meio da construção da tabela de quatro casas, fundamentadas na teoria das representações sociais com abordagem estrutural. Os resultados indicam como elementos centrais: estresse, responsabilidade, assistência integral e gratificação. Como sistema periférico, elementos atitudinais profissionais e pessoais necessários ao trabalho. Conclui-se que o trabalho estressante de responsabilidade é amenizado pela gratificação de prestar assistência integral, o que exige uma diversidade de atributos pessoais e profissionais.

KEY WORDS
Nursing care.
Intensive Care Unit.
Social psychology.

DESCRITORES
Cuidados de enfermagem.
Unidades de Terapia Intensiva.
Psicologia social.

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INTRODUCTION

The work of the ICU nurse is covered by special characteristics, due to care demands, with technological and human differences. In this Unit, the nurse develops direct care activities to patients and to the administration of every resource that is necessary to achieve recovery.

The ICUs aim at assisting critical patients requiring complex and specialized care, performed by a multi-professional team, in which the professional nurse is a member. These Units, therefore, concentrate human resources and patient care materials on a permanent basis, using precise and advanced technologies, aimed at a continuous observation that may support decisions and interventions under situations of decompensation\(^1\).

The constant expectation of critical patient decompensation and the work complexity inherent to concentration and the cutting-edge technology make the ICU environment quite complex. This complexity, allied to the accumulation of emotional components derived from social interaction and communication processes, is built into a demand for work development and emergency on patient care. Although this work is manifested on individual behavior, it can be featured as a product of the multi-professional team in the ICU social context.

Under the social context of belonging, filled with diversities, the work of a nurse is conceived by the individual or the group as an extension of behaviors, attitudes and norms. And social representations\(^2\) may arise.

The social representation theory \(\text{[...]}\) is a private knowledge modality that has behavioral elaboration and communication among individuals \(^3\) as its objective. It is featured as a compound of concepts, propositions and explanations originated from daily life and intended for the interpretation of reality\(^4\). It is, therefore, a common sense knowledge produced within social groups during the process of interaction and communication, which reflects the individuals’ status regarding their everyday objects.

In the ICU work dynamics, the communication and interaction among team members may initiate behavioral and attitude changes, responding to work conditions such as: constantly dealing with the limits of life; difficulties on accepting death; shortage of people and materials; conflicting situations with team members, patients and family members\(^5\), since the contact in which the changes occur causes alterations of conditions of production, circulation, functions and transformation of the SR\(^6\).

These understandings are noted by social representation theorists, when they say that the construction of social representations (SR) is defined as \(\text{[...]}\) a way of socially elaborating and sharing knowledge, presenting a practical orientation and competing for the construction of a common reality to a social compound\(^8\). It is featured as a product resulting from human activity, elaborated by communication and interaction among individuals during their daily activities\(^9\).

It is during everyday activities that individuals expose their reality, interpreted with subjective and intersubjective meanings\(^7\). Accessing SR is trying to understand the ways individuals use to create, transform and interpret feelings, perceptions and experiences about life within a social group. The SRs are built of beliefs, opinions, attitudes and values about a given social object, as a product of common sense knowledge.

The study about the work of the ICU nurse, by means of SR structure, may determine the recovery of professional work with a global overview that enables knowledge of the real work conditions and the process that articulates the relation between work objectivity and the subjectivity of each professional in the group. The representing elements may be deduced from the discourse contained meanings, that is, the quantifying indicators. These indicators may be studied by the Central Nucleus Theory (CNT)\(^10\). Studies using the CNT strengthen the heuristic plurality of social representations and its ability to explain daily reality according to the social groups\(^8\-\^{11}\).

This way, the work reality represented by nurses is re-appropriated by them, rebuilt from their cognitive systems and integrated to their value systems, according to the history and the ideological social context that surrounds them\(^11\).

The central nucleus (CN) is featured by a compound of elements surrounded by SR. It holds the meaning determination – in other words, the social representation structure. It is the element that organizes and subsidizes the fundamental and flexible meaning of social representation. The representing elements are organized, structured and constituted into an specific socio-cognitive system where one or more elements provides a greater meaning to representation – its own structure\(^12\).

The SR structure is constituted of structured socio-cognitive elements that make the CN and the peripheral system. CN is featured as a rigid, stable, composed of elements that give sense to other more flexible nucleuses, named peripheral nucleuses. The peripheral system is organized around the CN. The elements are flexible and enable a better context interaction, accessing reality, achieving, regulating and defending the CN\(^13\).

Identification of the CN and of the peripheral elements about the nurse’s work, the object of this study, may evidence what is really being represented by the quality group. Therefore, it is necessary to search for the inner nature of the work of an ICU nurse, since the work of these professionals in
this sector reflects their view of the experiences and transformations within their professional activity.

The study of the work of an ICU nurse is, however, a social phenomenon that must be clarified, since it depends on individual conditions of those who perform the job and may also be influenced by internal and external situations inherent to the established relations within the group[3].

Facing the exposition, we aim, in the present study, at featuring social representations elaborated by ICU nurses about their work, by identifying the CN and peripheral system.

It achieves relevance as it explains the way the studied object is represented by nurses working in ICU, locus of the present study, revealing possible influences of this representation in these professionals' work. It also may offer a contribution to knowledge, especially a reflection on the professional category of the unit, in order to improve this reality and motivate other investigations.

**METHODS**

This is a descriptive study, developed according to the Social Representation Theory (SRT)[3] regarding structural approaches[2].

The study was performed in five Intensive Care Units of two large hospitals that provide services to the Single Health System (SUS – Sistema Único de Saúde) users, where one hospital is public and the other philanthropic, also providing private services in Salvador. Both were chosen according to the following criteria: Aiming at care, education and research; providing services to the SUS user; a structured and organized Nursing Service based on regulations in which the general ICU composes one of its sectors; with active nurses in the unit for twenty-four (24) hours a day.

Considering the quantifying and qualifying properties in the social representations determinations, by a central nucleus and a peripheral system, the Evocation or Free Word Association (FWA) technique was used to collect data. The study was performed after the research project was approved by the field studies ethics committee and authorized by the organization.

The FWA is a projective psychology test that has been broadly used in SR structure studies. It helps locating a person's blocking and repression zones, that is, the conscience field exclusion of certain ideas, feelings and desires that the individual may not want to admit; however, these are still part of their psychic life[8].

The informants were previously oriented of the importance of this research, the procedures for data collection, their free will on participating or not on the study, based on their signature of the Term of Consent, according to orientations of the 196/1996 Resolution of the National Health Council[12], as well as the free word association test. Afterwards, for the FWA test, the subjects that accepted to participate in the research were required to speak five words or expressions that immediately occurred to them after motivated by the following inducing question: when talking about work in the ICU, what comes to your mind? Afterwards, the most important evocation considered was requested.

The test was performed in the period between May and June/2006, in both hospitals, on the active ICU nurses that held working time of six months or more, a period considered necessary for the achievement of the representations and group belonging consolidation.

The product obtained by free evocation of words was processed and analyzed with the support of the software EVOC[13]. This software calculates the simple frequency of each evoked word, the average evocation orders and the average of the average order of evoked words. Moreover, it enables lexicographic and quantifying data analysis, considering the four-digit chart. After the previous organization of the evoked elements, they constituted the corpus for analysis.

**RESULTS AND DISCUSSION**

The informant universe was constituted by 100 nurses. The following were excluded: one refused to participate in the study; three were on leave by the INSS (Social Security National Institute), with no return date set; one was being dismissed, and had no obligation on accomplishing the duty scale; four did not fit the working time criteria for the research; and one was the researcher. The sample was therefore, constituted by 90 subjects, composing 90% of the total.

The age of the interviewed varied between 23 and 47 years old, with an average of 32 years old, where (83) 92.23% were female and (seven) 7.77% were male. The working time length at the ICU varied from six months to 14 years, resulting on an average of four years.

The collected data showed an average order of evocations around three and the average frequency around fourteen. These data enables the construction of vertical and horizontal lines that divide the four-quadrant chart. The vertical axis corresponds to the average frequency; the horizontal, to the average evocation order.

In this quadrant compound, each one incorporates elements interpreted as: in the first quadrant (upper left), the most significant and promptly evoked terms are placed – Therefore, constituted by the elements that enable the identification of the central nucleus representation of the work of an ICU nurse. We point out that the elements that were considered as central hold a higher evocation frequency and a lower rate – in other words, a lower average order.
This also reveals the subjects’ latent, spontaneous speeches, since evocation reminds them spontaneously and promptly of something really present in their memory, that is equivalent to their system of values, ideas and beliefs.

The elements located in the second quadrant (upper right) and in the third quadrant (lower left) are considered intermediate and may approach both the central and peripheral elements. These are not analyzed by the CN Theory\(^2,11\), but by the greater SRT theory\(^3\).

Finally, the elements located in the fourth quadrant (lower right) are considered as integrants of the peripheral system. These are the less frequent evocations holding a higher rate or a higher average order and compose the elaborated thinking, that is, the speakers may intentionally elaborate the element, before expressing it\(^3,9\).

The 90 subjects evoked 450 words. However, 35 were eliminated, which were referred to only once, corresponding to 7.78% of the total evocation, to provide more consistency and explicitness to the representation according to the methodology orientation\(^14\). The remaining vocabulary totaled 415, and corresponded to 92.22% of the total. The research corpus was constituted by 54 different words.

Table 1 is presented, elaborated by EVOC 2000, based on the inducing term work of an ICU nurse. The chart shows, according to the speakers’ conception, the possible central system and peripheral system representation elements of the work of a nurse in this unit.

Table 1 – View of the work of an ICU nurse central nucleus according to the frequency and average order of evoked words. – Salvador, BA – 2006

<table>
<thead>
<tr>
<th>Average&gt;3</th>
<th>Average&lt; and = 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st quadrant</td>
<td>2nd quadrant</td>
</tr>
<tr>
<td>responsibility</td>
<td>Knowledge 37 2.405</td>
</tr>
<tr>
<td>Freq stressful</td>
<td>Team work 31 2.335</td>
</tr>
<tr>
<td>2 &gt;= rewarding</td>
<td>Love 29 3.636</td>
</tr>
<tr>
<td>14 full care</td>
<td>Ability 17 3.765</td>
</tr>
<tr>
<td>exhausting</td>
<td>Ability 15 3.133</td>
</tr>
<tr>
<td>dedication</td>
<td>Ability 14 2.929</td>
</tr>
<tr>
<td>tiring</td>
<td>Ability 14 2.690</td>
</tr>
<tr>
<td>attention</td>
<td>Ability 22 2.636</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd quadrant</th>
<th>4th quadrant</th>
</tr>
</thead>
<tbody>
<tr>
<td>commitment</td>
<td>Dynamic 8 2.500</td>
</tr>
<tr>
<td>Freq decision</td>
<td>Important 6 2.667</td>
</tr>
<tr>
<td>4 &lt;= organization</td>
<td>Discernment 4 2.250</td>
</tr>
<tr>
<td>critical patient</td>
<td>Competence 4 2.750</td>
</tr>
</tbody>
</table>

The work of a nurse in this unit, due to its complexity, precision and urgency, requires the performers to have direct contact with risk situations and with the continuous eminence of death. These stressful situations, inherent to the ICU work, may interfere in the daily activities of an intensive nurse, as the studies on nurses’ emotional states during professional performance in critical units\(^15\). Apart from these situations, the inherent responsibility to the work of assisting life is a feature that constitutes an inherent element of the work of a nurse in their daily activities in the sector.

These evocations demonstrate the importance and value attributed by the group to the representative elements that constitute the work of an ICU nurse, which not only evidence the importance of their work in the sector, but also stabilizing element that stabilizes the group’s representation\(^3\), which seems to be an essential condition for the work of an ICU nurse.
represent the SR functions, regarding their equivalence to systems of values and ideas of the normative and functional dimensions, where the autonomy of the nurse in the work development is included\(^{(16)}\). This equivalence is shown under two formats: one that establishes order, guiding the group’s behavior in their social world; and the other that enables communication between members of the group.

Also, the elements *exhausting, tiring and attention* are in this quadrant, and may act as supporting parties associated to the work of a nurse, as a consequence of its characteristics and operational conditions.

On the lower right quadrant, the elements featured are: *dynamic, important, discernment, competence, suffering, union, effort, relationship and patience*. This quadrant indicates that words were less evoked and held the last positions in the evocation order – that is, they hold high average orders and belong to an elaborated thinking process by the speakers, integrating the peripheral system. This way, they constitute less relevant meanings about the study object that may be activated to support the CN.

These elements promote an interface between actual reality experienced by nurses and the representation centrality about their work. It enables achievement and adapting the group to reality, due to the interaction of everyday experiences that generate more individual representations. Therefore, more accessibility and concrete components to the maintenance of CN functions were constituted\(^{(16)}\).

Thus, the peripheral elements evidence a relation to professional and personal attributes needed to the work of an ICU nurse. These are, in a certain way, basic and organized under complex structures that cross the entire representation\(^{(16)}\).

On the search for content in representations about the work of a nurse, which are related to several meanings, contents were rebuilt based on the hierarchy of the vocabulary evoked, ordered according to their place in the representation structure. Afterwards they were categorized according to the various nuclei of meanings they comprise.

This way, the following nuclei were identified, composed by *two central categories and two peripheral categories*. For that, the words contained in the upper left and lower right quadrants were considered, among other elements, as complementary to explain the categories, respectively denominated: *Work of an ICU nurse associated to stress and responsibility* and the *Work of an ICU nurse associated to full care and reward*. The meaning nuclei of the elements in the upper left quadrant are presented in Figure 1.

![Figure 1](http://www.ee.usp.br/reeusp/)

**Figure 1** – Social representation central categories of working nurses in ICU about their work – Salvador - 2006

The first central category: *Stressful and responsible work* – determined by vocabulary as *responsibility, stressful, exhausting, tiring, attention and commitment* show the exact nature of the work of a ICU nurse for these professionals. Their behavior may be connected to history or to the memory of that group, to the values and norm system and to the nature of the group’s involvement in the social context lived by the sector. It corresponds to the general orientation of working nurses in the sector, for the development of professional work\(^{(2)}\).

In this sense, responsibility is connected to appropriate knowledge by professionals throughout their working life or even by the way they think about their professional activity facing the world’s transformations, therefore, as a product of the communication and interaction process\(^{(17)}\).

The term *stressful* incorporates an expressive meaning of the work of an ICU nurse, when associated to the evoked terms *exhausting, tiring*. These terms are directly connected to the definition of stress and to its relation to demands that are greater than the dealing capacity of workers, as the term *responsibility* is connected to the element *attention*\(^{(18)}\). These elements are, therefore, components that support and expand the meanings of the category.

The second central category – *Nursing work associated to full care and reward* – is built by the evocations of *full care, rewarding, dedication, love, team work and autonomy*. In the ICU, the nurse may broadly develop his/her work, as well as use his/her acquired ability and knowledge throughout education and professional experience. This way, the work of a nurse in the sector is differentiated from others.
This is due to the continuous and effective care that the entire team needs to provide to critical patients admitted to the ICU. As members of this team, the nurses hold a major role, executing essential high complexity tasks, apart from controlling the execution of internal organizational processes in the unit, intent on effective full care. Studies on motivation confirm that the execution by itself, that is, patient care, rewards the professional since they find fulfillment of their own aspirations within it\(^{19}\).

Executing the task is what makes the professionals feel more complete, performing full care, achieving what is stated as their competence, where the autonomy of being a nurse is included, which may carry the rewarding feeling. Rewarding understood by common sense as a situation that satisfies internal feelings. It is supported here by the terms dedication and love.

These categories show opposite meanings, since, on the one hand, they feature the work as stressful, responsibility work, and on the other hand as full and rewarding care. This dualism seems to be a compensatory process, since stressful work is understood as something negative that damages the global performance of individuals, resulting from experiences causing feelings of tension, anxiety, fear or threat\(^{11}\). In this unit, it is common for nurses to experience these situations as a member of the team.

This category precisely evidences the meaning and the nature of the work of an ICU nurse in the conception between workers of the sector. These behaviors might have a connection with history or with the collective memory of the group\(^{21}\). The intensive care units, since their conception, have been featured as a reserved space for critical patient's attention. It requires the active nurse of this sector to be in a constant state of alertness, ranging from minor alterations that might indicate complications in the clinical status of patients to the most complex and severe, such as cardio respiratory arrest, which many times may lead to the death of the patient.

These situations, identified as stressful, may cause this work many moments that are hard to deal with, creating a negative understanding of the ICU work. The responsibility element represents every life care action, making it, by excellence, indispensable to the care in an ICU context. It also demonstrates the seriousness attributed by the group to the representative and constituted work elements of a nurse in this unit, when they represent their values and ideas in work development, achieving their representations.

Moreover, the elements full care and rewarding arise in this care space, because the nurse holds the opportunity to fully assume the work in which he/she was graduated in. Providing direct care to patients is a source of rewarding feelings for this professional, since it is common to perform this profession in the sector, according to the features of the type of care that may be performed. It is necessary for the nurse to see results from the attention provided to patients in all the dimensions of which care is comprised. They arise as a lever to a fulfilling and rewarding work, since it is possible to aim at the objectives of care.

As the central contents, the peripheral contents also reveal their categories. The elements of the peripheral\(^{21}\) system are outlines organized around the CN that make the interface between concrete reality and the central system possible. They are flexible, evolutional and protect the central nucleus.

In this study, these elements present senses that achieve these functions and may be organized into two categories, as exposed in Figure 2: Work of an ICU nurse associated to professional attributes and Work of an ICU nurse in the associated to personal attributes.

**Figure 2** - Social representation peripheral categories of working nurses in ICU about their work - Salvador - 2006

The first peripheral category – Work of an ICU nurse associated to professional attributes – is represented by contents that evidence the necessary qualities to ICU work, such as: competence, discernment, relationship and union. These qualities enable the group’s adaptation to reality, due to interactions and daily experiences, and are complementary, representing elements of the work of the professionals in this unit.

The evolutive and flexible characteristics of the first peripheral elements in the upper right quadrant integrate or belong to the centrality of the representation, that is, they may evolve into CN representations\(^{10,11}\), while the elements in the second periphery, that is, those related to the peripheral system, may keep the generating, organizing and stabilizing functions, which are characterized as support elements to CN\(^{10,11}\).
The second peripheral category - Work of an ICU nurse associated to personal attributes - is expressed by means of meanings related to the personal characteristics needed to work in an ICU, such as: dynamic, important, suffering, effort and patience. In the common sense, these elements point out the importance of being dynamic and diligent, of holding resignation to patiently deal with distressful situations that mobilize physical, intellectual and moral efforts of the nurse to reach the aim of fully caring for the patient.

Acting as an ICU nurse requires knowledge mastering, in order to perform technologies skillfully, with the required ability and competence for a satisfactory work. These professionals also face several situations that demand discernment in action prioritization, in which activities are permeated by relations between the nursing team and other professionals – As such, demonstrating that the nursing work is eminently about relationships, whether with patients, family members or with the team. Finally, union is understood as the element composing interdependent and shared work.

Dynamism is understood as a necessary attribute to the work in this unit, due to patients’ characteristics and the dynamics of clients’ care.

The ICU is a sector where patients are continuously evaluated. In the evaluation process, for conduct definitions, the work of a nurse is very important. It evidences a value attributed by their executors, which shows a certain valuation of common sense over the role of this professional in a general manner. It expresses that the group’s self-esteem is guided to building a new social value paradigm of the nurse’s work in the sector.

Acquaintance with critical situations contributes for the suffering of this worker. Since it is inevitable, this feeling holds different meanings and intensities in the social and cognitive individual scenario of this unit. Likewise, patients and family members’ suffering, human and technology limitations, as well as the workload, require effort and patience from this professional. These attributes have become necessary contents for the active professional in ICU and are differentials of care, in the same way they value the professionals and the profession.

**REFERENCES**


**FINAL CONSIDERATIONS**

This study showed that the analysis of free word evocations has guided us to the characterization of constituting elements in the SR structures of the work of an ICU nurse, evidenced by words as stressful, responsibility, full care and rewarding as the social representation central nucleus of the work of a nurse in this sector, for the investigated group. These evocations also reveal an evolution to the understanding of the nurse’s work at the ICU and their contents make it possible to determine the guiding and orientation of the daily work of these professionals, because rewarding and full care may be blocking managers from seeing the seriousness of such representation and, consequently, the need for efficient interventions to reduce work stress.

For the peripheral system, words such as competence, discernment, relationship, union, dynamic, important, effort and patience were evoked. Their meanings indicate professional and personal attributes adopted as attitudes in the work of an ICU nurse.

The CN composing elements point out to the need of reflecting about their contents, stressful and of responsibility, which not only feature the work of a nurse, but also show the positive interventional strategies, such as reduction of the workload, financial incentives that need to be implemented in order to reduce the negative aspects of this structure and thus consolidate the positive aspects of the attitude elements associated to full care, rewarding the representations evidenced.

Although not aiming to expend the topic with this study, we hope to contribute for the building of knowledge and for the reflection of nurses and all the professionals of this sector about the complexity of teamwork, as well as motivating the reflection of managers, with a view to value the work of the entire healthcare team in this sector.

Results still show the need for other studies aiming at expanding and understanding social representations of nurses, due to the transformations of their work at the ICU.


