

### Profile of nurse acting in a hospital as to the approach to spinal cord injury

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## RESEARCH

## PROFILE OF NURSE ACTING IN A HOSPITAL AS TO THE APPROACH TO SPINAL CORD INJURY

PERFIL DOS ENFERMEIROS ATUANTES EM UM HOSPITAL, QUANTO À ABORDAGEM AO TRAUMATISMO RAQUIMEDULAR

PERFIL DE ACTUAR DE LAS ENFERMERAS EN UN HOSPITAL EN CUANTO A LA APROXIMACIÓN AL LESIÓN DE LA MÉDULA ESPINAL

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## ABSTRACT

**Objective:** The SCI is a major health problem by causing the individual sequelae. This study aimed to know the profile of nurses in the hospital, and will approach the patient with SCI. **Method:** This was an exploratory descriptive qualitative and quantitative approach which was based on a non-experimental, documentary, directed by means of data collection. **Results:** We interviewed 15 nurses, most were female 66.66%. The most prevalent age group from 30 to 34 years. 80% have some kind of specialization. Most states do not be prepared to assist patients with SCI and that higher education institutions do not address satisfactorily the work of these professionals to patients with spinal cord injury and there is little promotion of training for hospitals. **Conclusion:** It is evident deficiency during the academic training of professionals to assist the victims of SCI patients. **Descriptors:** Spinal cord injury, Nursing, Spinal cord injury.

## RESUMO

**Objetivo:** O SCI é um importante problema de saúde, por causar no individuo sequelas. Este estudo teve como objetivo conhecer o perfil dos enfermeiros atuantes em unidade hospitalar, quanto à abordagem de paciente com SCI. **Método:** Trata-se de uma pesquisa exploratória descritiva com abordagem quali-quantitativa que se baseou no caráter não-experimental, documental, realizado por meio de coleta de dados. **Resultados:** Foram entrevistados 15 enfermeiros, a maioria era do sexo feminino 66,66%. A faixa etária prevalente dos 30 aos 34 anos. 80% possui algum tipo de especialização. A maioria refere não estar preparado para prestar assistência a pacientes com SCI e que as unidades de ensino superior não abordam de maneira satisfatória a atuação destes profissionais ao paciente com lesão medular e é escassa a promoção de capacitações pelas instituições hospitalares. **Conclusão:** Fica evidente a deficiência durante a formação acadêmica destes profissionais para assistir à pacientes vitimas de SCI. **Descriptores:** Traumatismo raquimedular, Cuidados de enfermagem, Lesão raquimedular.

## RESUMEN

**Objetivos:** La LME es un importante problema de salud por causa de las secuelas individuales. Este estudio tuvo como objetivo conocer el perfil de las enfermeras en el hospital, y se acercará a los pacientes con LME. **Método:** Se realizó una cualitativo exploratorio descriptivo y enfoque cuantitativo que se basa en un no-experimental, documental, dirigido por medio de la recopilación de datos. **Resultados:** Se entrevistaron 15 enfermeras, la mayoría eran de sexo femenino del 66,66%. La edad más frecuente el grupo de 30 a 34 años. 80% tiene algún tipo de especialización. La mayoría de los estados no estar preparado para ayudar a los pacientes con LME y que las instituciones de educación superior no abordan de manera satisfactoria la labor de estos profesionales a los pacientes con lesión de médula espinal y hay poca promoción de la formación para los hospitales. **Conclusión:** es la deficiencia de manifiesto durante la formación académica de los profesionales para ayudar a las víctimas de los pacientes con LME. **Descriptores:** Lesión de la médula espinal, Enfermería, Lesión de la médula espinal.

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## INTRODUCTION

The Traumatic spinal cord injury (SCI) is a major health problem due to the possibility of causing disability in the individual. It often occurs almost four times higher in men than in women.<sup>1</sup> In Brazil, there are about forty new cases per year per million inhabitants, making a total of six to eight thousand new cases per year.<sup>1</sup> Spinal cord injury is a serious neurological syndrome characterized by the impairment of motor skills, superficial and deep sensitivity and neurovegetative disorders of body segments located below the level of injury.<sup>2</sup>

Studies show that young people aged 16 to 30 years of age suffer more than half of new spinal cord injuries.<sup>3</sup>

The SCI can be divided into two categories: primary and secondary lesions. The primary comes from aggression or early trauma and are usually permanent. The secondary kind of lesions are consequences of injury with contusion or laceration where nerve fibers become edemas and disintegrate while producing hypoxia, hemorrhagic lesions, causing the destruction of myelin and axons.<sup>3</sup> These reactions are considered the main causes of degeneration in the spinal cord level of injury. The shock cord injury is reversible within 24 hours. Methods of early treatment are necessary to prevent that the impairment does not render partial and permanent leading to total commitment.<sup>3</sup>

At the hospital, the nursing staff has an important role in the treatment of injured individuals. The team operates minimizing possible complications arising from patient's new condition of life. The most common complications are pneumonia, urinary tract infections, thrombosis, pulmonary embolism, mood disorders such as anxiety and depression, bowel dysfunction, autonomic dysreflexia, bed sores, which, depending on the level of depth of tissue,

damage can lead to serious complications such as osteomyelitis, septicemia, and even cause the patient's death. To avoid these complications, there must be careful planning of nursing care<sup>4</sup>

To avoid complications in patients with SCI, there should be drawn care plans with all nursing staff. Guide the patient, family and caregivers, telling them that the health of the patient is of paramount importance, so that we can prevent avoidable consequences.<sup>4</sup>

This paper provides an insight into the profile of nurses in hospital, as the approach to patients with SCI, in view of the large number of occurrences related to this type of trauma.

## METHODOLOGY

The survey was conducted in the field, with an exploratory, descriptive and qualitative approach.

The survey was conducted in a Public Hospital Network in the city of Petrolina, PE. Study subjects were nurses working in the Emergency and Trauma Hospital in the city of Petrolina. The sample consisted of 15 nurses.

It was used as inclusion criteria, the professionals who fit the following situations: they had relationships with the Hospital and who had at least six months experience in the area. Participation in training prior broad sense in SCI and not accepting the terms of this research were used as exclusion criteria.

The collection was only made after the approval of this project by the Ethics and Research Committee on 25/08/2010 (CAAE-0023.0.441.441-10). The data relating to the characterization of clinical nurses, field hospital, were analyzed by quantitative method and the results were presented in the form of figures containing absolute numbers and percentages discussed in the light of literature. Issues relating to nurses in hospital, on the approach of patients

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with spinal cord injury, were analyzed by qualitative and quantitative analysis technique. We used content analysis proposed by Bardin being considered as a set of technical analysis of communications.<sup>5</sup>

#### Organization and critical analysis of data

Through data analysis, we sought to answer the central objective of the study, which is to know the profile of nurses in the hospital, on the approach of patients with SCI.

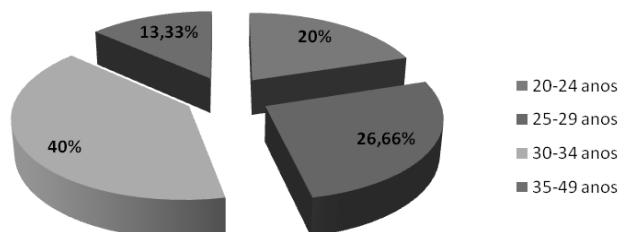
### RESULTS AND DISCUSSION

#### Sample characterization

The better understanding of the daily lives of professionals who provide care to patients with SCI is indispensable for evaluating the nursing care provided to this patient type. Thus, to apprehend the dynamics of nursing, we interviewed nurses with higher education, because we believe that this is the profession that has the role of guiding the rest of the team for quality care, according to the professional powers inherent in hierarchy.

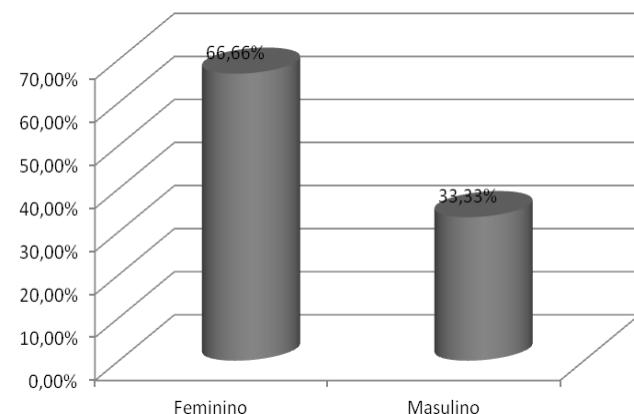
The sample was composed of fifteen nurses with higher education being used for its characterization the following variables: gender, age, length of training and experience in the hospital field, graduation, reasons that led the nurse to choose the hospital area.

Regarding the age of the professionals interviewed, it could be seen that the largest number was concentrated in the ages 30-34 years, representing 40% of the sample, followed by 25 to 29 years with 26.66%, 20-24 years with 20% and from 35 to 39 years with 13.33%, as shown in figure 1. Some other studies similar to ours, had a population of professionals working in the age group of 34 to 41-years<sup>6 7-8</sup>, reflecting that the nursing staff is relatively young, with most in the range of more productivity of their lives.<sup>9</sup>



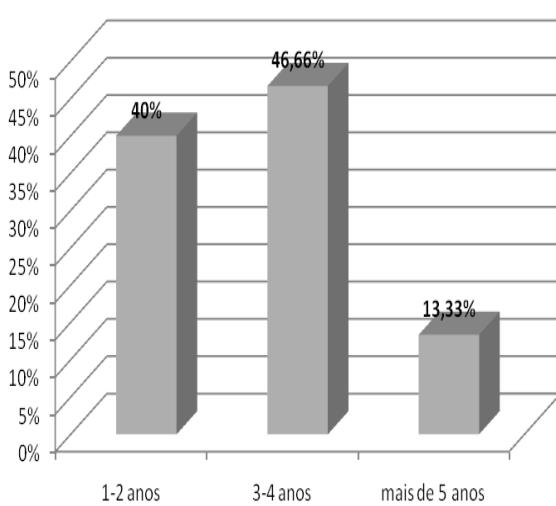
**Figure 1:** Quantitative presentation over the age of nurses working in the hospital.

The gender was formed by 66.66% female and 33.33% male (see figure 2), which confirms the strong presence of women in this occupational category, although this scenario is being modified, since it is increasing the enrollment of men's health courses among which the nursing program. Several other studies conducted in other hospitals in the country confirm our results, where in relation to gender, there is a predominance of females.<sup>3-6-7</sup>



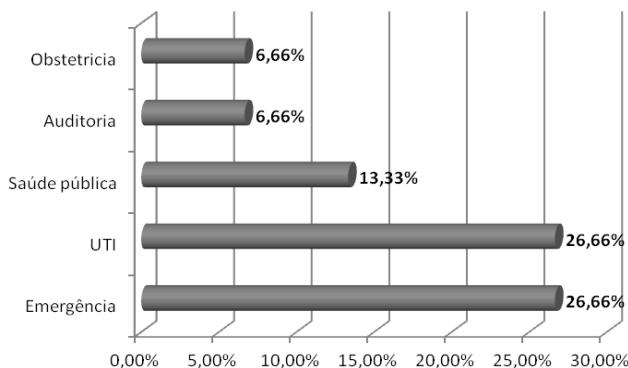
**Figure 2:** Quantitative presentation of the gender of nurses working in the hospital.

In terms of training time, most of the sample falls within the period of 2-3 years of graduation, accounting for 46.66%, followed by 1-2 years as 40% and 13.33% reported having more than 5 years graduation (see figure 3). In other research, 60% of professionals have at least 10 years of service diverging from our sample where professionals with little time training occupy most positions, perhaps this is due to entry of a large number of recent college graduates in recent years,<sup>6</sup> as a result of new public university in Petrolina-PE (UNIVASF-2004).



**Figure 3:** Quantitative presentation on formation time of nurses working in the hospital.

80% of professionals surveyed reported having some graduation. These postgraduate courses in the emergency and intensive care represented a majority, each corresponding to 26.66% of the sample, followed by public health with 13.33% and auditing and obstetrics corresponds to 6.66% each, as illustrated in Figure 4.



**Figure 4:** Quantitative presentation on graduation of nurses working in the hospital.

Among the reasons that lead nurses to choose to work in hospitals, 80% answered that they liked the profession and 20% to get experience. These views are consistent with the training received by these professionals, where some schools still adopt a model of teaching for hospital practices, in recent years we can observe a change in this respect.<sup>4</sup> Studies show that even dealing with these patients regularly, many professionals are still insecure assisting.<sup>6</sup>

#### Nursing staff team approach towards patients with spinal cord injury

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Regarding nursing care to patients in the hospital with SCI, we found that the participation of this professional category is essential for an effective treatment, because we believe that is one of the professionals within the health care team that plays a key role in identifying the factors that should be worked out, avoiding or minimizing the spheres of biopsychosocial consequences that may interfere with the patient's injured spinal adaptation to the new condition of life after trauma. In this way we will highlight the actions mentioned more frequently in our interview.

#### Upgrade offers promoted by the hospital about SCI

SCI is one of the most devastating diseases affecting modern society, affecting mainly young individuals who were previously healthy and economically active, with a big social impact.<sup>10</sup> The SCI is an injury to the spinal cord which can cause neurological damage, such as changes in motor, sensory and autonomous functions.<sup>4</sup>

The nurse is a healthcare professional who needs daily to expand his/her knowledge, since there is a constant evolution in the forms of assistance and hospital equipment used to provide patient care. One of these developments is the care of the patient in a planned and systematic way.<sup>11</sup>

We investigated whether the institution promoting training on patients with SCI should be addressed by the nursing staff. Among the respondents, 80% reported not receiving refresher courses on the SCI. This situation reflects an unprepared team, which creates anxiety, stress and wear involved, causing consequential damages to the health of the patient as well as to professionals.

#### Difficulties in providing care to patients with SCI, explained by nurses

The patient with SCI is characterized as highly dependent on nursing care for their

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recovery process follow a favourable course.<sup>12</sup> Spinal cord injury is considered one of the most serious among the disabling syndromes, and, thus, one of the biggest challenges to rehab.<sup>13</sup> The systematic process of nursing is a suitable method that assists nurses in identifying and solving current or potential problems of individuals as well as family and community, thereby improving the quality of nursing care provided.<sup>14</sup>

We can evaluate in this research that more than half of respondents did not provide any professional difficulties in providing assistance to patients with SCI. Other studies show that there was a predominance of the individuals who considered themselves prepared to provide care to patients with spinal cord injury, however some of these have failed to correctly describe and sequence all the steps to the correct approach these patients in primary care need.<sup>9</sup> Some reports of the nurses on the presence or absence of difficulty in meeting patients with SCI helps us understand the situation experienced daily by each to depend on their work sector, as presented below in the speech of different professional sectors:

*I feel unprepared, because I do not work directly with patients with this diagnosis. (Nurse 2 - Clinical Medicine)*

Despite having almost daily contact with patients with this diagnosis, some professionals demonstrate not to be prepared to provide quality care, as evidenced in the speech below:

*I have no experience to give quality care to this type of patient. (Nurse 3 - Surgical Clinic)*

Another interviewee, even though she doesn't have problems nowadays, she demonstrated in reports some difficulties in the beginning and only after the service became a routine she can act more confidently, as we can see in his report that follows. It is worth noting that the institution that served as a field for this

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research, the sector of the surgical clinic patients involves both general surgery and neurosurgery, there has not one, despite being a reference for this type of patient, a clinic exclusively for neurological care.

*Over time, I got used to it and identified myself as the kind of approach that should be made to the patient with SCI, but in the beginning I was very insecure. (Nurse 4 - Surgical Clinic)*

Other studies corroborate this research in the sense that most of the professionals who considered themselves prepared to assist the patient with SCI are allocated in sectors where there is a higher frequency of the presence of patients, for example, in Clinical Surgery, ICU and emergency.<sup>9</sup>

#### **View of nurses about possible complications to which SCI patients are exposed to.**

Currently in the light of new resources, the increased survival of patients with medullary injuries is a reality. It is so important to health professionals a greater knowledge on the subject, mainly on the clinical complications to which these patients are exposed to.<sup>12</sup>

The lack of knowledge of the staff on how to assist these patients can bring some complications, and the most frequent are: pressure ulcers, urinary and pulmonary complications.<sup>16</sup>

The nursing staff plays a fundamental role in the recovery process of patients because many of the sequels due to spinal cord injuries can be prevented or alleviated with quality care. Changes in physical mobility, sensitivity deficit disorders, genitourinary and gastrointestinal outbreaks are included in nursing care.<sup>14</sup>

In a study by other authors, among the possible complications of SCI, those that have been reported by patients as the most frequent complications were urinary tract with 44%. 24% said there had been no change, 8% reported the

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appearance of pressure ulcers as the only complication, 16% reported pressure ulcers and urinary tract infections, 4% reported infections and pulmonary complications and 4% reported pressure ulcers and pulmonary complications.<sup>15</sup>

*Patients with SCI may have respiratory complications, urinary pathways and muscle atrophy. The nurse appropriately manipulating probes helps to decrease the risk for urinary tract infections and in conjunction with physical therapy the appearance of ulcers would be avoided, and the exercises help in strengthening the muscles. (Nurse 4 - Surgical Clinic)*

We believe that there is a decrease of complicating events for these patients as well as possible sequelae should be a line with the quality of practice of health professionals based on the quest for knowledge.

We know that knowledge is the key to future power shifts, given that it opens new horizons and new possibilities for personal growth and social construction.<sup>9</sup> It is evident the importance of activities for the promotion of health updates.

#### Vision of nurses on their professional training

In our sample, almost all nurses reported not being satisfied with the subsidies offered by teaching institutions where they did their undergraduate degree in nursing. This is evident in the account of one of the nurses, as we can see below:

*At least in my graduation it was not much discussed, I think that this issue should be approached with more relevance, since it is one of the most common problems in hospital settings and requires skilled professionals to address this type of patient. (Nurse 4 - Surgical Clinic)*

Some studies show the need for trained professionals to assist patients with spinal cord injury, as patients are characterized as highly dependent on nursing care.<sup>9-12</sup>

The nurse has a special feature that facilitates their role as educators with the J. res.: fundam. care. online 2013. out./dez. 5(4):599-05

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patient: they are the element of the healthcare team that longer stays with the patient and have the ability to observe him/her and consider him/her as a particular individual and not just as another case.<sup>16</sup> Therefore, the nurse must apply the nursing process in all patients with the care system. This makes clear the need for a more satisfying approach about the care that nurses must provide to these patients, as well as frequent recycling in their fields of work, all in search of improving assistance to these patients, who both require nursing care.

#### FINAL CONSIDERATIONS

This work reveals the deficiency of training at undergraduate and postgraduate nurses involved in research. It also alerts to the need for more information on nursing degree and various specialties for proper care of the patient with column trauma.

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