MEN WITH SPINAL CORD INJURY IN REHABILITATION: A CONTEXTUAL ANALYSIS

HOMENS VÍTIMAS DE LESÃO MEDULAR EM REABILITAÇÃO: UMA ANÁLISE CONTEXTUAL

DESCRITORES: Traumatismos da Coluna Vertebral; Medula Espinal; Cuidados de Enfermagem; Saúde do Homem.

RESUMO

Objetivo: analisar os aspectos contextuais e secuelas produzidas pela lesão medular em homens jovens e as ações de enfermagem. Método: estudo descritivo realizado a partir da produção nas bases LILACS, BDENF e SciELO, bem como livros e dissertações. Se analisou o material à luz do modelo de análise de contexto, que indica quatro camadas de relações contextuais interativas: imediato, específico, geral e meta-contexto. Resultados: o análise contextual baseou-se em subtemas: homens com lesão medular (imediato); sequelas da lesão medular e ações de enfermagem (específico); mudança na vida cotidiana desses homens (geral) e diretrizes de atenção à pessoa com lesão medular (meta-contexto). Conclusão: é necessário que haja valorização das necessidades biológicas, psicossociais e espirituais da pessoa com lesão medular, sob a ótica da assistência humanizada. Descritores: Traumatismos da Coluna Vertebral; Medula Espinal; Cuidados de Enfermagem; Saúde do Homem.

SUMMARY

Objective: to analyze the contextual aspects and consequences produced by spinal cord injury in young men and nursing actions. Method: a descriptive study conducted from search in LILACS, BDENF and SciELO as well as in books and dissertations. The material was analyzed in the light of context analysis model, which indicates four layers of interactive contextual relationships: immediate, specific, general and meta-context. Results: the contextual analysis was based on sub-themes: men with spinal cord injury (immediate); sequelae of spinal cord injury and nursing actions (specific); changes in the daily lives of these men (general) and guidelines of care for people with spinal cord injury (meta-context). Conclusion: it is necessary that there be valorization of the biological, psychosocial and spiritual needs of the person with spinal cord injury must be considered, from the perspective of humanized care. Descriptors: Spinal Injuries; Spinal Cord; Nursing Care; Men’s Health.
INTRODUCTION

Spinal cord injury (SCI) is a clinical condition of the spinal cord that can be temporary or permanent. Estimates suggest that there are about 20 to 40 individuals/million/year with SCI worldwide, and the proportionately more affected segment is composed by young adult males. In Brazil, 130,000 individuals have consequences arising from this event.1

The main features of SCI stem from negative motor and sensory changes and neurological and vegetative disorders below the injury. Statistics show that the main causes of SCI are accidents and violence, specially injuries from firearms, traffic accidents, diving in shallow water, falls or decompression illness.2 Because of its severity and irreversibility, it demands, for improving quality of life for individuals who have suffered this trauma, a long rehabilitation program that, in most cases, does not lead to cure, but helps in adapting to new life.

It is emphasized the need for multidisciplinary actions, with focus on the nurse’s role, in the rehabilitation process of the person with SCI, taking into account all the biopsychosocial changes resulting from the disability caused by the injury in order to avoid negative overcoming strategies. In addition, goals and objectives must be outlined to contribute to the reduction of stress factors, for example by engaging the victim as co-author of his own history.3,5

Nursing is a field of global changes related to the way of performing and understanding care, as well as to the demands generated by population changes and to the implications for family and professional caregivers. The health care comprises occupations consolidated in various social contexts of the present, each, most often, analyzed by specific fields of knowledge. Add the structural population changes related to demographic and epidemiological transition to those in family, social and sanitary systems and, particularly, in the ways of understanding and performing care.4,7

The after-effects of spinal cord injury are often avoided or minimized with effective rehabilitation program and effective participation of engaged multidisciplinary team, especially the nursing staff providing direct care to these patients within 24 hours. All of these effects are linked in their biopsychosocial context.

Given the above, the following guiding questions were prepared: “What are the contextual aspects of the complications and sequelae produced by SCI?” and “Which are the nursing actions to minimize the complications and sequelae of SCI?” Thus, this study aims to: analyze the contextual aspects of the complications and sequelae produced by spinal cord injury in young men and nursing actions.

METHOD

Descriptive study based in the narrative literature review, conducted from an online search in the period from August to December 2014 in the Latin American and Caribbean Health Sciences (LILACS), Nursing Database (BDENF) and Scientific Electronic Library Online (Scielo), as well as in dissertations, theses and books.

It was used controlled terms in accordance with the Health Sciences Descriptors (DeCS): Injuries to the spinal cord, Spinal cord, Nursing care and Men’s Health. Then, it was held a search through these descriptors in the aforementioned databases and finally the review of the studies, excluding those not consistent with the scope of the search, as well as duplicate studies.

It was adopted as inclusion criteria: scientific productions that provided evidence to the proposed theme, available for free and in full text, written in Portuguese, English or Spanish languages and published in the last ten years (2004-2014). It was selected productions with Brazilian reports, due to the different configuration of nursing in other countries, which could influence analyzes concerning nursing care to victims of SCI.

Initially, 2,886 papers were found, among which 1,488 were full articles, three dissertations and three theses investigating the meanings and experiences lived by the victims of SCI and their families inside and outside the hospital, as well as identification of the profile of hospitalizations due to spinal cord traumas according to patients’ characteristics, injuries, external causes that produced them, as well as aspects related to their admissions, and analysis of nursing staff knowledge about nursing care to these patients.

The contextual theoretical framework was chosen3 to understand the phenomenon from the contextual levels set in four distinct interactive layers, namely: immediate, specific, general and meta-context. These concepts are interconnected and interrelated, however, for a better understanding, they are presented in this article, following the division proposed by the theoretical framework. It
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should be noted that the terms care, support and nursing actions are key words, which were kept to ensure the fidelity of the quote.

The immediate context concerns the main features of immediacy, its focus is present and is represented by the phenomenon itself. Whereas the specific context is characterized by individualized and unique knowledge that encompasses the immediate past and relevant aspects of the current situation, in other words, it includes the elements that are present in the environment and that influence the phenomenon. Subsequently, the general context deals with the frameworks of life of the subject, developed from their interpretations derived from past and current interactions, personal beliefs and cultural values that influence the phenomenon in question, and the meta-context reflects and embodies the past and present, in addition to highlighting conditions and learning for the future.4

**CONTEXTUAL ANALYSIS**

Following the contextual perspective, the findings from the narrative review of scientific literature were set up on four sub-themes: men with spinal cord injury (immediate), complications and sequelae of SCI and nursing actions (specific), changes in everyday life (general) and guidelines of care for people with spinal cord injury (meta-context), as shown in Figure 1.

![Figure 1. Sub-themes related to men with spinal cord injury according to the context theoretical framework. Natal/RN, 2015.](image)

- **Men with spinal cord injury (immediate)**

Spinal cord injury is a major source of disability whose main consequence is the loss of potentially productive years of life. The importance of this issue is based on the high incidence of trauma causing SCI, deaths, and morbidity in survivors. The SCI victim suffers psychomotor changes and becomes undeniably a challenge to the nursing staff.

The SCI victim, either with paraplegia or tetraplegia sequel, both as a result of SCI, experiences public health problems, especially deriving from specific complications of this trauma and from the difficulties of families to cope and provide care to these people in their homes, which may lead to successive hospitalizations.9

Due to the currently existing resources, increased survival of these patients became a reality. Thus, it is important to train health professionals on the subject, particularly on the clinical complications that are practically related to clinical complications that are virtually restricted to SCI victims.10,11

Prevention and treatment for the consequences of SCI are modifying according to scientific and technological advances, and greater engagement of victims in several rehabilitation programs in Brazil, which guarantee not only survival but also reeducation because they take into account the remaining potential that causes the increase in life expectancy, reduction of sequels and consequently improves the quality of life. Despite these advances in neuroscience, responses of the victims to the
incident, including the fear of disfigurement and disability, loss of sexual activity and the fear of death, still remain.12

- Complications and sequelae of SCI and nursing actions (specific)

Pressure ulcers are the most frequent complications in SCI. They are responsible for the stay of patients in hospitals, account for much of the delays in the rehabilitation process, and are also active foci of infection.In the cardiovascular system, it is observed autonomic dysreflexia, postural hypotension, venous thrombosis and pulmonary embolism, which deserves attention due to severity and potential risk of death for the patient,10,13-4 and also infection and urinary retention, especially in patients with neurogenic bladder, where the urinary tract invasion is facilitated by the presence of catheters, stasis in bladder, immobilizations and common urologic complications such as vesicourethral reflex, lithiasis and bladder diverticulum, as well as in patients with indwelling catheters.14·6

The contextual analysis is subdivided into three sub-themes that are interconnected and interdependent: systematization of nursing care, nursing actions to face the sequelae and complications of SCI and humanized nursing care to the spinal cord injured patient.

From the point of view of Systematization of Nursing Care, the interpersonal process is very important, where nurse and patient observe and communicate with each other through feelings and attitudes. Among the objectives of this interaction, there is the ability to identify and meet the needs of the individual, family or community in preventing or coping with the disease and the suffering and also in find meanings in these experiences.17

In assisting the spinal cord injured patient, the nurses’ working process takes as the object of intervention the nursing care needs, without, however, despising the work organization and human resources in nursing.18

The process of care/caring is not easy task or relationship, it is a two-way street, where the person and the professional are continually challenged to teaching, learning, negotiation and conscious dialogue, which result in new perspectives to qualify of life.19

From the perspective of humanized nursing care to victims of SCI, it is required of nurses that they share with users experiences that result in the implementation of their shares, restricted to care, as synonymous of help to the chances of survival.9

The period from the catastrophic event to the start of treatment is as a moment of many doubts and uncertainties regarding the trauma and that includes the decisions to be made regarding the treatment and the confrontation with the possibility of permanent disability and death.9

The situation requires a multidisciplinary approach, since it has associated lesions in multiple systems with focus on respiratory failure, motor and sensory loss, flaccid paralysis, manifestations of muscular weakness and tendon areflexia, superficial and profound anesthesia associated with vasomotor changes and bladder and bowel dysfunction. There is also occurrence of hypotension by loss of peripheral vascular resistance and loss of bladder and bowel control, disappearance of sweating and vasomotor tone below the injury.7

The individual with SCI presents self-care deficits, and must be seen as having skills and potential to relearn and/or expand self-care actions. Those individuals are able to interact with the environment, reaching self-care since health professionals and family are able to encourage them and stimulate them, in the quest for control of the factors that affect their own development, carrying out activities to promote their welfare and their health, seeking for an improvement in quality of life.20

To do so, the nurse and the multidisciplinary and interdisciplinary team may use different methods according to the requirements arising from the self-care deficit, and may do some activities for the person with SCI, guiding, providing psychological or physical support, providing and maintaining a personal atmosphere, or teaching them how to deal with the limitations.20

- Changes in everyday life of these men (general)

Caring for people in physical limitation is a challenge for nurses and nursing team, given the complexity and specificity resulting from the coping mechanisms of victims, such as: variables related to disability, severity of the injury; variables inherent to the organism itself, such as level of education and internal control locus, immediate environment, such as existing health services and job opportunities and cultural context, such as as current law and social prejudice.21

It is important to discuss the care due to the fact that it will meet physical, emotional and social needs, aiming to conciliate therapeutic and propaedeutic actions, making
Thus the spinal cord injured patient as independent as possible with quality life and especially an active subject in their own actions. It is also believed that by doing so we can prevent complications, reducing the length of hospital stay, readmissions and thereby reducing unnecessary costs, making it a productive and participative person in the social context.²²,²³

The chronic condition generated by the sequelae of SCI causes significant social and economic loss, leading to frustration with life, loss of work capacity, partial impossibility of movement and leisure, need to adapt, and in some cases loss of autonomy, changes in body image and also negative feelings ambiguous between fear of permanent disability and social exclusion.¹²,²⁴

Moreover, sexual practice and frequency become reduced after SCI. The erectile response often occurs insufficiently to experience orgasm, and may not occur at the desired time or with sufficient duration. These factors, along with the fear of rejection or failure, contribute to reducing the frequency and the difficulties of sexual activity, hindering thus the conjugal life.²⁵

♦ Guidelines of care for people with spinal cord injury (meta-context)

To deal with the magnitude of the problem, the Ministry of Health through the Care Guidelines for Amputated People, the Guidelines of Care for People with Spinal Cord Injury and the Care Guidelines for the Health of People with Disabilities constitutes framework recommended by the Ministry of Health as a way to train health professionals and multidisciplinary health teams in the Unified Health System (SUS). In this sense, they bring detailed information on how to proceed regarding the diagnosis, characterization of the disease, treatment, control and monitoring of users, etc.²⁶

This care has four lines of action: access to education, health care, social inclusion and accessibility. Among the actions, there is is the creation of Specialized Rehabilitation Centres (SRC), which aims to increase access and quality of health services provided to people with disabilities in order to promote the comprehensive care of health and thus ensure maintenance of their physical and mental health as well as the development of their autonomy and social inclusion.

To change the reality of spinal cord injured patients and achieve the ideal in rehabilitation treatment, the detailed, accurate and regionalized quality of information is essential. Considering that the annual worldwide incidence of SCI is approximately 15 to 40 cases per million inhabitants. In the US, the incidence is approximately 12,000 new cases per year, and of these, 4,000 will die before reaching the hospital and another 1,000 will die during hospitalization.²⁶

The care to the person with SCI requires the support of an interdisciplinary team, and it is essential that the nurse, as a member of this team, aims to promote and restore health of these patients, in order to prevent complications and facilitate the rehabilitation process and, consequently, facilitate the integration of the individual with SCI in society.²⁰

Rehabilitation in cases of SCI is a long learning process that extends throughout the life of the individual. Patients, families and health professionals must share the responsibility for the gradual reconstruction of a new way of living, which carries with it a personal, family and social reintegration issue, added to the changes intrinsic to the injury itself.²⁰

CONCLUSION

This study allowed greater understanding of the nursing actions to men victimized by SCI from the analysis of the contextual aspects of this phenomenon. It is observed, in the immediate context, that victims of spinal cord injury are exposed to various consequences, such as: pressure ulcers, osteoarticular deformities, heterotrophic calcification, retention, urinary incontinence and infection, pulmonary embolism, constipation, among others.

The patient affected by SCI, particularly men, need, during their treatment, good balance in their nutritional status, control of emotions, physical activities appropriate to the level of injury and motor impairment, breathing exercise to prevent stasis pneumonia and emotional support to help them in their physical and mental well-being.

The variability of these factors will also depend on the psychological aspect of each patient, on the support from family and friends, and also on the trauma itself, regarding the affected area (impairment): paraplegia, hemiplegia, tetraplegia, responses to clinical, surgical and physical treatment. Nursing professionals together with multidisciplinary and interdisciplinary team should provide care to patients in rehabilitation, paying attention to their psychosocial needs, in order to know the kinds

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of emotions and the general problems triggered by trauma.

Few studies carried out by nursing focus on the training and knowledge of nurses who provide care to these patients, as well as studies on how men cope with their autonomy after SCI. Another bibliographic gap found, which may be the subject of future studies, refers to the retention and urinary incontinence and self-care mechanisms to deal with this problem.

REFERENCES


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