#### 113 - SPINAL TRAUMA AS TRIGGERING FACTOR OF LONG HOSPITAL STAY - A CASE STUDY

ELIANE SANTOS CAVALCANTE RICHARDSON AUGUSTO ROSENDO DA SILVA GLAUCEA MACIEL DE FARIAS Federal University of Rio Grande do Norte, Natal/RN, Brazil elianeufrn@hotmail.com

#### INTRODUCTION

The hospitalization of the patient is determined not only by the requirement for medical treatment, but also by the need of nursing care all day long which ensures the continuity and effectiveness of the treatment to which it is subjected to guarantee the rapid recovery of their integrity (AQUINO, 1984).

Since the reorganization of health care inevitably turned to holistic could discourage the construction and use of inefficient facilities and incompatible with this new concept of health, making the hospital a comfortable atmosphere and therapeutic (CAPRA, 1982, p.330).

It is known that the hospitalization causes changes in order bio-psycho-socio-spiritual, the patient and his family, since the withdrawal of a person in your family environment is responsible for a certain discomfort: the patient is obliged to is adapted to its new "home", the hospital, which in many cases is seen as a strange place, feared, and the family, they are unable to achieve alone, to ensure the improvement of their loved one.

When the person hospitalized is responsible for maintaining the family, the discomfort created around you and the family is considerably greater because it comes very concerned for a quick improvement so you can return to work and ensure the sustenance of their families.

The family by not feel able to offer specialized assistance to the patient is obliged to hospitalize him, as a way to alleviate this shortage of human and technological resources.

Some of the factors that can lead to hospitalization of a patient are the chronic degenerative diseases, among which stands out the trauma. REZENDE et al (2002) says that the trauma is regarded as a disease that can be avoided and, depending on its variables is capable of causing death.

According to Ferreira (1999) the trauma is defined as an injury that shows how variable the extent, the intensity and severity, being caused by external agents, which can be physical, chemical or other means and not intentional.

It is fundamental knowledge of how certain factors contribute to lengthen the hospital and how the nurse may help reduce the stay. Thus to understand the cause of this long stay is necessary to know the individual (patient) as a whole and its social context.

In our country, these events account for the majority of trauma, totaling 42% of cases. The spinal cord trauma occurs in more men in the stage between 18 and 40 years in 65% of cases (CAMPOS et al 2008). What determines, inevitably in need of prolonged hospitalization.

There are countless factors related to the causes of long hospitalization such as: physical, social, psychological and cultural, since many domestic feed the belief that only get cure in the hospital and take the "bed" like their space, property and shelter, many times of personal needs arising from social coexistence rather successful.

But we know that, rationally, hospitalization is undesirable for both the patient and their family members, thus the planning for high should be taken immediately after admission to secondary assessment, and because the patient suffered from spinal trauma, already complex set of treatment prognosis, And consequent long stay in the hospital because further complications.

The spinal cord injury is one of the most serious and disabling devastating syndromes that can jeopardize human beings, subject to bankruptcy because of a series of vital functions such as locomotion, sensitivity, elimination of urine and feces and autonomic nervous system, which considerably increases the changes (GREVE et al, 2001).

When the trauma is addressed from the aspect of the hospitals, providing care to victims of TRM, there is a strong impact on the possible need for a long hospital stay, is seen that most of these patients will be crippled for the past labor activities, making it is therefore total dependent of nursing care, presumably for a long time.

The first references found in literature about the spinal trauma until we arrive in the ancient Egypt, from the medical observations recorded in the Edwin Smith papyrus, translated by breasted. This papyrus dates from 1700 B.C.

In Greek and Roman periods, are the main work of Hippocrates, around the year 400 BC which he referred to manipulation for reduction of fractures and dislocations of the spine, reaching even to admit the need for decompressive spinal cord operations in cases of fracture of the spine. His teachings were repeated and expanded by Galen, about 500 years later. After a period of thirteen centuries without progress. In the sixteenth century began with the start of operations in the marrow, most of them dealing with trauma, develops most often to poor results, according SILVEIRA (2000).

In face of these reports occurred so long ago realized that the time factor is trauma interventions complex and invasive, requiring the patient to remain at rest for long periods with physical mobility impaired and therefore dependent-care professionals, but also to be restricted in an environment conducive to their recovery.

It is known that the hospitalization causes changes in order bio-psycho-social-spiritual in the patient and his family, since the withdrawal of a person in your family environment is responsible for a certain discomfort: the patient sees itself obliged to retrofit its new "home", the hospital, which in many cases it is seen as a strange place, feared, and the family, feels unable to achieve alone ensure the improvement of their loved one.

When the person hospitalized is responsible for maintaining the family income, the discomfort created around you and the family is considerably greater because it comes very concerned for a quick improvement for the person can return to work and ensure the maintenance of his family.

The hospital also lead to changes in lifestyle of the person in their habits, emotional attachment to restriction of freedom of the patient. This is obliged to live with strange people, often very different him, creating uncertainty and even interference in the acceptance of their treatment.

The separation of people who are part of their social group generates conflicts in the mind of the patient, because it starts to feel a sense of loss of their social space.

The family's participation in the process of recovery of the patient is of great importance because it is the main link between the patient and social environment.

#### **CASE PRESENTATION**

On February 08, 2003, was admitted to continue the clinical treatment of spinal cord injury (T6) and spastic quadriplegia the patient LAM, 44 years with maiden full secondary education This event occurred on 16 / 12/2002 when it suffered after fall accident in pit to plus or minus six meters in height, showing loss of consciousness for more than twenty days. He received first aid at the scene of the accident and remained hospitalized in ICU of another hospital in a coma vegetative evolving, without improvements in the level of consciousness. Examination was carried out of picture: computed tomography of chest and skull revealed that spinal trauma and diffuse cerebral edema. After more than 1825 days of hospitalization (IHL) in February 2008, received the same hospital remained in nutritional support and physiotherapy, and nursing home care. Regained consciousness but remains aphasia, answered in a reflex way, entering engines and fascia patterns characteristic of the painful sensation painful stimulus, shows movements in koreic lower limbs. At palpation was observed preservation of sensitive surface (heat, pain and vibration) above the level of spinal cord injury.

With this clinical picture, tried to intervene so individualized moving to systematize the care of nursing from the following conducts: mobilization and careful in bed together, breathing control with the observation frequency, if necessary aspiration of secretions and provisioning of oxygen through a mask of venture graduated according to medical prescriptions, hygiene care in bed with attention to the skin in order to prevent a pressure ulcer and oral hygiene after rigorous expectations in order to reduce the appearance of dental caries and halitosis, nutritional support with appropriate monitoring of nutritionist, An exchange of invasive connections such as: team scalp, nasoenteral tube and urinary catheter periodically conduct targeted by this service for hospital infection control and psychological support through the conversation, but that no verbal response and guidance and support to family members.

#### DISCUSSION

In the face of various complications arising from TRM, the man you see shaken at one of its most complex achievements that is freedom of action, and from then on will feel unable to launch to the wonderful and incessant search of personal achievement.

The shift, from the desire to achieve, acquire, hold and build the world, writes the story and helps give the man the independence and autonomy as desired (BATTISTELLA, 1994).

Such autonomy can only be achieved after specific treatment will be delivered on effective institutional environment equipped with technological resources and trained professionals. We believe that after the spinal trauma that changed the life of the individual abruptly, so that it acquires its autonomy there is "urgent need for expert assistance to work in their reintegration" (FARO, 1995).

When a person with spinal cord injury comes at a hospital, the philosophy that involves is that she is a human being and should be recognized in its entirety. His rehabilitation will therefore be integral, that is, physical, mental and social (RIBAS, 1986).

Several authors, among them SILVA (2000) and WOLDOW (1998) affirm that each individual is unique and because of that individuality, the question / change or challenge that brings to the hospital also needs to be seen as unique.

This factor generates a positive relationship between patient and nursing staff be seen that this remains with him for twenty-four hours a day. It is often that the patient now in a position to receive high, but several factors that are most often the social and economic order to prevent the good grace to accept the idea of returning to his home.

It is worth adding that the hospitalization of the patient is injured, most of the time, the need to provide assistance related to the competence of the nursing team who take responsibility not only for the performance of specific techniques, but also the way to identify and promote ways that will satisfy the basic needs of affected patients.

In this context, to find in the hospital "under insurance", the injured patient fears a return to its previous condition. Another reason cited is the harmonious coexistence and even brotherly with medical nursing.

It is essential after the provision of pre-hospital care compliance with the degree of understanding of the nurse as this provide key role in rehabilitation of injured spinal cord making it the earliest independent. The guidelines provided to them during the hospitalization, are also related to decision-making autonomy of the victim of TRM and immediate context in which it is inserted in order to plan as early as possible its high.

It is to this end that concerns us as you need for admission and stay of patients in the hospital for prolonged periods, whose number is increasing alarmingly, given the very progress that reflects the worldwide increase in accidents and urban violence.

The long hospital stay not only generates negative aspects for the patient in hospital for the institution itself, since it is known that one reason for the increase in spending on the health care model is the dressing in hospital. "It is necessary to analyze, thus the behavior of organizations in view of its social commitment to society" (AQUINO, 1984).

ALMEIDA (1980) argues that the criteria are virtually unknown forms of control or the need itself, assistance and treatment to the patient hospitalized.

Points, also the same author who often delayed by interventions in the course of treatment prolongs the time of hospitalization, contributing thus to the disease from worsening and no longer can be treated early.

## CONCLUSIONS

We believe that the spinal cord injury sets triggering factor of the long hospital stay due to severe disease that most often causes the patient numerous sequels and disabilities which determines in need of medical interventions and consequent need for long period of hospitalization.

With skill and competence, the interdisciplinary team, and especially the nurses can help minimize the difficulties arising from such long hospital stay, so that these professionals should include participation by family, friends and community.

This family may be trained to perform simple care under the supervision of nurses, in order to continue to do so after discharge, but the patient should be trained for self, and made periodic evaluation of their learning, leading It was into account the individual skills.

It is very important, too, considered in planning for high systemic aspects of the injured spinal cord, such as adequate nutrition, psychological state, prolonged use of antibiotics and mechanical ventilation and the presence of a pressure ulcer.

All this together will collaboration of the patient and family care and systematic nursing hopes that it might help to minimize hospital stay, allowing the recovery of the patient and her return to previous activities and family conviviality.

We believe that this case report can help motivate new studies related to trauma as a factor directly or indirectly responsible for the long hospital stay, which will allow greater exchange of experience for so many cases that experience within the various hospitals.

Key Words: SCI, Hospitalization, Nursing.

#### REFERENCES

ALMEIDA, M. H. **Enfermagem na composição dos custos hospitalares**. Tese de professor titular. Escola de Enfermagem. Universidade federal da Bahia. Bahia, 1980.

AQUINO, G. S. Pacientes adultos hospitalizados. Rio de Janeiro: Cultura médica, 1984, p.78.

BATTISTELLA, L.R. Prefácio, in: LIANZA.; SPÓSITO, M.M. de M. **Reabilitação:** a locomoção em pacientes com lesão medular. São Paulo, Sarvier, 1994.

BRESTED, J.H. The Edwin Smith surgical papyrus published infac-simile and hieroglyphic transliteration with translation and commentary in two volumes. Chicago, Univ. of Chicago Press, 1.596p.

CAPRA, F. **O ponto de mutação**: a ciência, a sociedade e a cultura emergente. São Paulo: ed. CULTRIX, P.330, 1982.

CAMPOS, Marcelo Farias, et al. **Epidemiologia do trauma da coluna vertebral**. Rev. Col. Bras. Cir. Vol. 35 nº 2 Rio de Janeiro març/abr, 2008.

FARO, A.C.M. **Do diagnóstico à conduta de enfermagem:** a trajetória do cuidar na reabilitação do lesado medular. São Paulo, 1995. 207f. Tese (doutorado) Escola de enfermagem. Universidade de São Paulo.

FERREIRA, Aurélio Buarque de Holanda. **Novo Aurélio Século XXI:** o dicionário da língua portuguesa. 3.ed. Rio de Janeiro: Nova Fronteira, 1999.

GREVE, et al. Diagnostico e tratamento da lesão medular espinhal. São Paulo; Roca, 2001.

REZENDE, et al. O perfil das vítimas de trauma atendidas na esfera hospitalar no município de Santa Cruz do Sul / Rio Grande do Sul . Revista Nursing. n. 55, p. 18-22, Dez/2002.

RIBAS, J.B.C. O que são pessoas deficientes. 3. ed. São Paulo: Brasiliense, 1986. p.10-52

SILVEIRA, P. R. **Trauma raquimedular - Diagnóstico e tratamento nas emergências**. J.B.M. Rio de Janeiro: v.78, nº6, p.17, 2000.

WALDOW, V.R. O cuidado humano, o resgate necessário. Porto Alegre; Artes Médicas, 1998.

### Principal author: ELIANE SANTOS CAVALCANTE

End. Åv. Dão Silveira, 4404, Condomínio Parque das Pedras, Bloco D, apto. 102 Neópolis, CEP:59066-180. Fone: (84) 3207-4265/ Cel.: 8894-2557. E-mail: elianeufrn@hotmail.com

### SPINAL TRAUMA AS TRIGGERING FACTOR OF LONG HOSPITAL STAY - A CASE STUDY

INTRODUCTION: The spinal cord injury (SCI) is one of the most serious syndromes that can achieve the human being, it causes failure of a number of vital functions. Knowing that the hospitalization causes changes in the general patient and family, we identify important bibliographies that portray the (SCI) as a cause of the long hospital stay. OBJECTIVE: To identify the TRM in the literature as a factor in long-term hospitalization and the actions undertaken by the nursing staff. METHODOLOGY: Search the literature of the last ten years from the databases of BIREME and LILACS, with the descriptors of spinal cord trauma hospital X, which found 02 articles, and spinal cord trauma nursing X with 21 articles. The same descriptors were used in BDENF, identifying 14 articles. For the selection of the articles were considered the following inclusion criteria: neurological patients and have been hospitalized for more than three months. RESULTS: In Brazil, 40 new cases annually per million inhabitants with a total of 8 thousand cases a year where more than 50% of these require hospitalization, which is the approximate cost of \$ 300, 000, 000.00 per year. The long stay in bed interferes with the rehabilitation, increasing the length of hospitalization with overall mortality estimated at 24% which reflect the degree of care and knowledge of nursing. Stress the importance of physical care and prevention of complications to prevent long hospital stay that has as its main causes the sensitive and sphincter disorders and related injuries in other organs or systems. CONCLUSION: We believe that the articles dealing with the damage caused by long hospital stay (LPH) are restricted. Generally addressing other factors as being responsible for long-stay patient in the hospital. The texts obtained only two attribute as a factor of LPH complications arising from systemic infections such as SCI.

Key Words: SCI, Hospitalization, Nursing.

### LE TRAUMATISME DE LA MOELLE EPINIERE COMME FACTEUR DECLENCHEMENT LA LONGUE DURÉE A L'HOPITAL-ETUDE DE CAS

INTRODUCTION: La lésion de la moelle épinière (TRM) est l'un des syndromes les plus graves que peut atteindre l'être humain, il provoque l'échec d'un certain nombre de fonctions vitales. Sachant que les causes des changements hospitalisés dans le patient et sa famille, nous identifier les bibliographies qui représentent le TRM comme une cause du long séjour à l'hôpital. OBJECTIF: Identifier les TRM dans la littérature comme un facteur à long terme hospitalisés et les actions entreprises par le personnel soignant. METHODOLOGIE: Recherche de la littérature de ces dix dernières années à partir de la base de données de BIREME et lilas, avec les descripteurs de la moelle épinière traumatisme hôpital X, qui a jugé que les articles 02, et la moelle épinière traumatisme de soins infirmiers X avec 21 articles. Il en va de même des descripteurs ont été utilisés dans BDENF, d'identifier 14 articles. Pour la sélection des articles ont été examinés suivant les critères d'inclusion: les patients neurologiques et ont été hospitalisés pendant plus de trois mois. RÉSULTATS: Au Brésil, 40 nouveaux cas par an par million d'habitants avec un total de 8 mille cas par an où plus de 50% d'entre eux doivent hospitalization, qui est le coût approximatif de \$ 300, 000, 000.00 par an. Le long séjour au lit interfère avec la remise en état, l'augmentation de la durée à l'hôpital avec de mortalité global estimé à 24%, ce qui reflète le degré de soins et de la connaissance des soins infirmiers. Souligner l'importance des soins physiques et la prévention des complications à long prévenir séjour à l'hôpital qui a comme principales causes des troubles sensoriels et esfincterianos et les blessures liées à d'autres organes ou systèmes. CONCLUSION: Nous pensons que les articles relatifs aux dommages occasionnés par le séjour à l'hôpital (LPH) sont restreints. Généralement répondre à d'autres facteurs comme étant responsables de long séjour du patient à l'hôpital. Les textes obtenu que deux attributs en tant que facteur de LPH complications résultant d'infections systémiques telles que la TRM.

Mots Clés: TRM, Hospitalization, Infirmier.

# EL TRAUMA DE LA COLUMNA VERTEBRAL COMO FACTOR DESENCADENANTE DE LARGA ESTANCIA EN EL HOSPITAL - ESTUDIO DE CASO

INTRODUCCIÓN: La lesión de la médula espinal (TRM) es uno de los síndromes más graves que puede alcanzar el ser humano, que provoca el fracaso de una serie de funciones vitales. Sabiendo que la hospitalización ocasiona cambios en la general del paciente y la familia, podemos identificar importantes bibliografías que retratan la TRM como causa de la larga estancia hospitalaria. OBJETIVO: Para identificar el TRM en la literatura como un factor en el largo plazo, hospitalización y las acciones emprendidas por el personal de enfermería. METODOLOGÍA: Búsqueda de la literatura de los últimos diez años a partir de las bases de datos de BIREME y LILACS, con los descriptores de la médula espinal trauma hospital X, que encontró los artículos 02, y la médula espinal trauma de enfermería X con 21 artículos. Descriptores de la misma se utilizaron en BDENF, la identificación de 14 artículos. Para la selección de los artículos se consideraron los siguientes criterios de inclusión; pacientes neurológicos y han sido hospitalizados durante más de tres meses. RESULTADOS: En Brasil, 40 nuevos casos anuales por millón de habitantes con un total de 8 mil casos al año donde más del 50% de estos requieren hospitalización, que es el costo aproximado de \$300,000,000.00 por año. La larga estancia en la cama interfiere con la rehabilitación, el aumento de la duración de la hospitalización con la mortalidad global estimado en el 24% que reflejan el grado de atención y los conocimientos de enfermería. Destacar la importancia del cuidado físico y la prevención de las complicaciones a fin de evitar la estancia hospitalaria, que tiene como principales causas las sensoriales y esfincterianos y las lesiones en otros órganos o sistemas. CONCLUSIÓN: Creemos que los artículos relativos a los daños causados por larga estancia en el hospital (lph) están restringidas. En general, hacer frente a otros factores como responsables de larga estancia del paciente en el hospital. Los textos sólo obtenerse dos atributo como un factor de Iph complicaciones derivadas de infecciones sistémicas como la TRM.

# Palabras Clave: TRM, de hospitalización, enfermería.

### O TRAUMA RAQUIMEDULAR COMO FATOR DESENCADEANTE DA LONGA PERMANÊNCIA HOSPITALAR -ESTUDO DE CASO

INTRODUÇÃO: O traumatismo raquimedular (TRM) é uma das mais graves síndromes que pode atingir o ser humano, pois causa falência de uma série de funções vitais. Sabendo-se que a hospitalização provoca alterações gerais no paciente e família, consideramos importante identificar bibliografias que retratem o TRM como causa da longa permanência hospitalar. OBJETIVO: Identificar na literatura o TRM como fator de longo tempo de hospitalização e as ações desenvolvidas pela equipe de enfermagem. METODOLOGIA: Busca na literatura dos últimos dez anos a partir das bases de dados da BIREME e LILACS, com os descritores traumatismo da medula espinhal X hospitalização, onde encontramos 02 artigos, e traumatismo da medula espinhal X enfermagem com 21 artigos. Os mesmos descritores foram usados no BDENF, identificando 14 artigos. Para a seleção dos artigos foram considerados os seguintes critérios de inclusão: pacientes neurológicos e que tenham ficado hospitalizados por mais de três meses. RESULTADOS: No Brasil, 40 novos casos anuais por milhão de habitantes com um total de 8 mil casos/ano onde mais de 50% destes necessitam de internação, onde o custo aproximado é de U\$ 300, 000, 000,000 por ano. A longa permanência no leito interfere na reabilitação, aumentando o tempo de hospitalização com mortalidade global estimada em 24% o que refletem o grau de cuidados prestados e de conhecimento da enfermagem. Ressaltam a importância do cuidado físico e prevenção de complicações para prevenção da longa permanência hospitalar que tem como principais causas os distúrbios sensitivos e esfincterianos e lesões associadas em outros órgãos ou sistemas. CONCLUSÃO: Consideramos que os artigos que tratam dos prejuízos causados pela longa permanência hospitalar (LPH) são restritos. Geralmente abordam outros fatores como sendo responsáveis pela longa estada do paciente no hospital. Dos textos obtidos apenas dois atribuem como fator de LPH as complicações advindas do TRM como infecções sistêmicas.

Palavras-Chave: TRM, Hospitalização, Enfermagem.