

11 - AVALIAÇÃO DA FUNCIONALIDADE DAS PESSOAS COM LESÃO MEDULAR SEGUNDO A CLASSIFICAÇÃO INTERNACIONAL DE FUNCIONALIDADE, INCAPACIDADE E SAÚDE (CIF)

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INTRODUCTION

The understanding model of human functionality by the International Ranking of Functionality, Inability and Health (CIF) was published by the World Health Organization in 2001, according to this model, the functionality of an individual with a certain health condition depends on corporeal aspects as well as personal and environmental factors. The CIF aims to homogenize terminologies in health area, allowing data comparison between different places and moments in history (OMA, 2003).

The CIF use is justified by the need to understand and describe the functionality of people with spinal cord injury, since this, differently from others, shows focus on the functionality of the individual, that is, the purpose of the CIF is to bring to light the abilities and potentialities of the evaluated individuals (FARIAS, BUCHALLA, 2005).

As seen, because it is a complex condition in reference to the seriousness, intensity and to the different types of corporeal alteration due to SCI, it is believed that the particular monitoring of each individual is fundamental to the development of a physical rehabilitation as well as a strategy to re-socialize people with spinal cord injury. Thus this paper aims to classify the functionality of people with SCI in the county of João Pessoa - PB.

METHODOLOGY

A descriptive cross-sectional study was conducted. A sampling plan was used with 25 people with either disability or permanent mobility constraint. The established criteria for inclusion were, individuals of both genders, young and adults aged between 18 - 60, paraplegics with complete or incomplete spinal cord injury, regardless of the time of injury, linked or not to the institutions selected and disposed to participate in the study.

The study was developed in five support institutions for people with disability in the João Pessoa county. The data collect occurred from April to July 2012. Two criteria were taken into account: I (Individual Socioeconomic and Clinical Profile), II (CIF: Body Structure, Function of the Body and Activity and Participation), they were applied in the form of interviews by the researcher. From descriptive and exploratory analysis of the quantitative data it was produced graphics and tables of simple frequencies or cross charts as well as calculations of averages, minimums, maximums and standard deviations in the variables of interest. It was also used the statistical technique of Multiple Comparisons and Correlation Analysis to measure the degree of relationship between the mean scores of the CIF categories.

RESULTS AND DISCUSSIONS

Among the people interviewed, 68% are men, aged between 25 and 40 years, 92% retired or receiving assistance and only 44% have completed high school. The majority (56%) are of black or brown race predominantly Catholic or Evangelical / Protestant religion (88%).

We analyze in this study the evaluation of the deficiencies in the functions of the body, the limitations in the activities and restrictions in the participation and the barriers and facilitators for the functionality of the person with spinal cord injury.

Table 1 – Evaluation of impairment in body functions of people with SCI. João Pessoa, PB, Brazil – 2012.

CIF	Without impairment		With impairment	
	Freq.	%	Freq.	%
Body functions				
Emotion ¹	1	4,00	24	96,00
Body image ²	4	16,00	21	84,00
Fecal continence ²	9	36,00	16	64,00
Weight maintenance ²	15	60,00	10	40,00
Urinary continence ²	6	24,00	19	76,00
Sexual arousal ²	11	47,83	12	52,17
Sexual preparatory phase ²	5	23,81	16	76,19
Orgasmic phase ²	4	17,39	19	82,61
Stage of sexual resolution ²	7	31,82	15	68,18
Discomfort in sexual intercourse ²	15	71,43	6	28,57
Muscle strength ²	0	0,00	24	100,00
Muscle tone ²	2	8,33	22	91,67
Involuntary movements ²	10	41,67	14	58,33
Skin ¹	9	39,13	14	60,87

1 Categories; 2 Subcategories.

Source: Research data. João Pessoa, PB, 2012.

In Table 1, it can be observed information about the impairment of body functions attributed by the individuals after SCI, being possible to observe that the most affected categories and subcategories among the interviewees were related to

Emotional Functions (96%) and Body Image (84%), components of Mental Functions domain; Urinary continence (76%) (Urinary functions domain); Functions related to muscle strength (100%) and muscle tone (91.67%) (Neuromusculoskeletal and related to movement functions domain).

Among the participants, 96% reported impairment in emotional function. Regarding this function, the above evidence confirms the existence that the alterations in the emotional functions of people with spinal cord injury are common and result from the circumstances and changes that occurred in the life of these individuals. Authenticating the study carried out by Conceição et al. (2010), who stated that the majority of the sample was classified as having moderate to severe depression (36.8%) or mild to moderate depression (35.2%).

The subcategory urinary continence is indicated with impairment in this study by the majority of the interviewees. Corroborating with the study of Almeida (2002) in his doctoral thesis, which evaluated the deficiency in urinary function as one of the main complications reported by the individuals. Another study conducted in Denmark also showed that among the main complications resulting from the spinal cord lesion is the neurogenic bladder (LIDAL, et al., 2008).

A high level of impairment was observed when the subcategories were evaluated: sexual arousal² (52.17%), preparatory sexual phase (76.19%), orgasmic phase² (82.61%) and sexual resolution phase² (68.18%). These data confirm the citation of the study by Fischer et al. (2002), which states that emotional stress, low self-esteem, and feelings of inadequacy complicate intimate relationships, but these emotional aspects do not interfere on the interest and need of the person with spinal cord injury to express sexuality.

In the activity and participation component, the capacity qualifier describes the ability of the individual to perform a task. In this, the interviewees were instructed to indicate the degree of difficulty to perform the tasks described in the following table:

Table 2 – Evaluation of impairment of individuals with spinal cord injury in the activity and participation component. João Pessoa, PB, Brazil – 2012.

CIF	Without Impairment		With Impairment	
	Freq.	%	Freq.	%
Activity and Participation				
Change the body position ¹	17	68,00	8	32,00
Maintain the body position ¹	11	44,00	14	56,00
Walk ¹	1	4,17	23	95,83
Take care of the body parts ²	22	88,00	3	12,00
Regulation of micturition ²	9	37,50	15	62,50
Regulation of defecation ²	14	56,00	11	44,00
Informal social relationships ³	23	100,00	0	0,00
Romantic relationships ³	18	72,00	7	28,00
Marital relationships ³	8	44,44	10	55,56
Sexual relationships ³	7	30,43	16	69,57
Paid work ⁴	10	43,48	13	56,52
Community life ⁵	13	52,00	12	48,00
Practice of sports ⁵	14	58,33	10	41,67
Art and culture ⁵	12	50,00	12	50,00
Human rights ⁵	3	12,00	22	88,00

1Mobility Domain → Categories: change and maintenance of body position and walking and walking category; 2Personal care Domain → Categories: care of body parts and care related to excretion processes; 3Relations and interpersonal interactions → Categories: informal social relationships and intimate relationships (subcategories → romantic, marital and sexual relationships); 4Major areas of life Domain → paid work category; 5Social and civic community life Domain → Categories: community life, recreation and leisure (subcategories of sports practice and art and culture) and human rights. Source: Research data.

It can be seen in the table above that the domains with the highest level of impairment were: mobility, in walk category (95.83%); personal care, in the subcategory regulation of urination (62.50%); relationships and interpersonal interactions, in the subcategory sexual relationships (69.57%); paid work (56.52%), and in the domain of community, social and civic life, in the human rights subcategory with 88% (Table 2).

The impairment was observed in the activity and participation component, in the mobility domain, in which the walking category was one of the most affected categories, so that it was identified that SCI generated a severe impairment in the motor function of the people interviewed, with functional changes of various degrees of disability, implying consequences for the performance of movements such as walking and standing upright. The difficulties in the balance were perceived in a negative way, but the rehabilitation of these individuals appears as a way to be followed in the search for the development of other capacities from which they can obtain the satisfaction of their needs and desires. In this scope, Lianza and Sposito (1994) pointed out that strolling is the first loss noticed by the patient after the injury. Pecci (1980) and Paiva (1982) also demonstrated that there is a concern about the inability to walk and the paralysis of the physical movements that are often referred to as incapacitating to transit in the world with autonomy and freedom. Pecci (1980, p. 76) states that paraplegia divides man. Everything is halved. "The spirit-man is the same. The will-man is the same. The love-man is the same. But he does not move the man-legs [...]. Though together, they are separate."

Table 3 - Prevalence of the individuals' perception regarding the facilitating or barrier role of environmental factors after spinal cord injury. João Pessoa, PB, Brazil - 2012.

CIF	Facilitator		Barrier	
	Freq.	%	Freq.	%
Environmental factors				
Immediate family	15	58,33	10	41,67
Friends ¹	19	72,73	6	27,27
Health professionals ¹	7	28,00	18	72,00

Table 3 - 1 Categories belonging to the domain support and relationship. Source: Research data. João Pessoa, PB, 2012.

Among the evaluated items, it is important to point out that the immediate family as facilitator presented a

slightly higher index of those who mentioned as barriers. The fact that this qualifier is recognized as negative is due to the lack of knowledge on the part of the family, regarding the consequences and limitations caused by SCI. But some interviewees also refer to the immediate family as a facilitator, as people who have contributed to their fullness in all aspects of life.

Friends are pointed out by most of the participants as facilitators, especially in the evaluation of sexual function, whereas for many were the first people to talk about this aspect without embarrassment, being referred to by more than one individual as people with whom they had their first sexual experiences after the injury.

Among the environmental factors addressed in the interviews as barriers of health condition, the relevance of the individual attitudes of health professionals was evident, being expressed several causes that motivated the interviewees to this judgment, among them are, lack of knowledge to deal with the person with SCI and negligence.

CONCLUSION

It was found that people with SCI present greater impairments in body functions in the emotion category and in the subcategories strength and muscle tone, which mainly compromises autonomous locomotion, in order to interfere on the development of daily activities, as well as in the process of social reintegration after SCI. In relation to the evaluation of the impairment of individuals with SCI in the activity and participation component, there was a greater impairment in locomotor movement; work; maintain affective and sexual relationships and exercise their rights as citizens.

In the evaluation of the third and final domain of the CIF, where barriers and facilitators were classified, in order to reveal the impact of environmental and social factors on the PCLM function, it was observed that friends are facilitators for the social inclusion process of PCDs, since they host and stimulate the development of several areas of life, which is not always the case with the family since it tends to overprotect the person with SCI due to a lack of knowledge of the existing limitations. The health professionals are predominantly a barrier in this process, a worrying fact, since these are indispensable characters who should act as facilitators, thus becoming clear the fragility of the public policies directed to PCDs in Brazil. Based on these results, we infer that a health care specifically developed to respond to the demands of PCLM would bring considerable benefits to these individuals.

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EVALUATION OF THE FUNCTIONALITY OF PEOPLE WITH SPINAL CORD INJURY ACCORDING TO THE INTERNATIONAL RANKING OF FUNCTIONALITY, INABILITY AND HEALTH (CIF) SUMMARY

After a spinal cord injury, the individual's functionality is commonly affected and several factors are involved in this process. PURPOSE: to classify the functionality of people with spinal cord injury in the municipality of João Pessoa - PB. METHODOLOGY: a descriptive cross-sectional study. The Sampling Plan was used by Reference Chain, with a sample of 25. Participants of both genders, young and adults aged between 18 and 60 years, paraplegic patients with complete or incomplete spinal cord lesions were established as inclusion criteria, which were willing to participate in the study. The study was developed in five institutions of support for people with disabilities in the county of João Pessoa. Data were collected from April to July 2012. Two instruments were used: I (Socioeconomic and Clinical Profile of Individuals), II (CIF: Body/corporeal Structure, Body Function and Activity and Participation). The descriptive and exploratory analysis of the quantitative data was carried out, graphs and (tables/charts) of simple or crossed frequencies were produced, as well as calculations of averages, minimums, maxima and standard deviations in the variables of interest. RESULTS AND DISCUSSIONS: The categories and subcategories most affected in relation to body functions were emotion, bowel and bladder, sexuality and strength and muscle tone. In the field of activities and participation, the greatest difficulties were in locomotor tasks; work; maintain affective and sexual relationships and exercise their rights as citizens. In the field environmental factors were classified as facilitators: family and friends. The categories classified as barriers were health professionals. CONCLUSION: the application of CIF in people with spinal cord injury allowed to demonstrate a series of limitations in these patients, as well as highlighted fragility in several areas of life of PCLM in order to facilitate the rehabilitation process.

Keywords: Spinal cord injury; International Classification and International Classification of Functioning, Disability and Health, Disability and Health.

ÉVALUATION DU FONCTIONNEMENT DES PERSONNES SOUFFRANT DE LÉSION MÉDULLAIRE, SELON LA CLASSIFICATION INTERNATIONALE DU FONCTIONNEMENT, DU HANDICAP ET DE LA SANTÉ (CIF)

RÉSUMÉ

Après une lésion médullaire le fonctionnement de l'individu est normalement affecté et plusieurs facteurs sont impliqués dans ce processus. OBJECTIF : Classer le fonctionnement des personnes souffrant de lésion médullaire dans la ville de João Pessoa – PB. MÉTHODES : étude descriptive transversale. On a utilisé l'échantillonnage par chaîne de référence, avec échantillon de 25. Les critères d'inclusion : sujets des deux genres, jeunes et adultes de l'âge entre 18 et 60 ans, paraplégiques souffrant de lésion médullaire complète ou incomplète qui se sont mis à disposition à participer d'étude. L'étude a été développée

en cinq institutions de soutien à la personne handicapée dans la ville de João Pessoa. La saisie des données a eu lieu dans la période entre avril et juillet 2012. On a utilisé deux instruments : I – Profil socioéconomique et clinique des sujets ; et II – CIF : Structure du corps, Fonction du corps et Activité et participation. On a fait l'analyse descriptive et exploratoire des données quantitatives, des graphiques et des grilles de fréquence simples et croisés, des calculs minimums, maximums et des moyennes, et encore des écarts types dans les variables d'intérêt. **RÉSULTATS ET DISCUSSIONS** : les catégories et sub-catégories les plus affaiblies par rapport aux fonctions du corps ont été émotion, intestin et vessie, sexualité et force et tonus musculaire. Au domaine des activités et de la participation, on a noté les difficultés majeures dans les tâches de locomotion, travailler, maintenir des relations affectives et sexuelles et encore exercer leurs droits en tant que citoyens. Au domaine des facteurs environnementaux, on a noté la famille et les amis comme les agents facilitateurs. Les catégories classées comme barrières ont été les agents de santé. **CONCLUSION** : l'application de la CIF en personne souffrant de lésion médullaire a permis de démontrer une série de limitations à ces patients, ainsi que elle a recensé la fragilité dans plusieurs aspects de la vie des PSLM de façon à faciliter le processus de réhabilitation.

Mots-clés : Lésion médullaire ; Classification internationale ; Classification internationale du fonctionnement, du handicap et de la santé ; Handicap et santé.

EVALUACIÓN DE LA FUNCIONALIDAD DE LAS PERSONAS CON LESIÓN MEDULAR SEGÚN LA CLASIFICACIÓN INTERNACIONAL DE FUNCIONALIDAD, INCAPACIDAD Y SALUD (CIF)

RESUMEN

Tras una lesión medular, la funcionalidad del individuo es comúnmente afectada y factores diversos están involucrados en este proceso. **OBJETIVO**: clasificar la funcionalidad de las personas con lesión medular en el municipio de João Pessoa - PB. **MÉTODOS**: estudio descriptivo de delineamiento transversal. Se utilizó el Plan Amostral por Cadena de Referencia, con muestra de 25. Se establecieron como criterios de inclusión: sujetos de ambos géneros, jóvenes y adultos con edad entre 18 - 60 años, parapléjicos con lesión medular completa o incompleta, que se dispusieron a participar del estudio. El estudio fue desarrollado en cinco instituciones de apoyo a la persona con discapacidad en el municipio de João Pessoa. La recolección de datos ocurrió en el periodo de abril a julio de 2012. Se utilizaron dos instrumentos: I (Perfil Socioeconómico y Clínico de los Sujetos), II (CIF: Estructura del cuerpo, Función del Cuerpo y Actividad y Participación). Se realizó el análisis descriptivo y exploratorio de los datos cuantitativos, se produjeron gráficos y tablas de frecuencias simples o cruzadas, además de cálculos de promedios, mínimos, máximos y desviaciones estándar en las variables de interés. **RESULTADOS Y DISCUSIONES**: las categorías y subcategorías más comprometidas en relación a las funciones del cuerpo fueron emoción, intestino y vejiga, sexualidad y fuerza y tono muscular. En el dominio actividades y participación, las mayores dificultades fueron en las tareas locomotor; trabajo; mantener relaciones afectivas y sexuales y ejercer sus derechos como ciudadanos. En el campo factores ambientales se clasificó como facilitadores: familia y amigos. Las categorías clasificadas como barreras fueron los profesionales de la salud. **CONCLUSIÓN**: la aplicación de la CIF en personas con lesión medular permitió demostrar una serie de limitaciones en esos pacientes, así como planteó fragilidad en diversas áreas de la vida de las PCLM para facilitar el proceso de rehabilitación.

Descriptor: Lesión medular; Clasificación Internacional y Clasificación Internacional de Funcionalidad, Incapacidad y Salud.

AVALIAÇÃO DA FUNCIONALIDADE DAS PESSOAS COM LESÃO MEDULAR SEGUNDO A CLASSIFICAÇÃO INTERNACIONAL DE FUNCIONALIDADE, INCAPACIDADE E SAÚDE (CIF)

RESUMO

Após uma lesão medular, a funcionalidade do indivíduo é comumente afetada e fatores diversos estão envolvidos neste processo. **OBJETIVO**: classificar a funcionalidade das pessoas com lesão medular no município de João Pessoa – PB. **MÉTODOS**: estudo descritivo de delineamento transversal. Empregou-se o Plano Amostral por Cadeia de Referência, com amostra de 25. Estabeleceram-se como critérios de inclusão: sujeitos de ambos os gêneros, jovens e adultos com idade entre 18 - 60 anos, parapléjicos com lesão medular completa ou incompleta, que se dispuseram a participar do estudo. O estudo foi desenvolvido em cinco instituições de apoio a pessoa com deficiência no município de João Pessoa. A coleta de dados ocorreu no período de Abril a julho de 2012. Utilizaram-se, dois instrumentos: I (Perfil Socioeconômico e Clínico dos Sujeitos), II (CIF: Estrutura do corpo, Função do Corpo e Atividade e Participação). Realizou-se a análise descritiva e exploratória dos dados quantitativos, produziram-se gráficos e tabelas de frequências simples ou cruzadas, além de cálculos de médias, mínimos, máximos e desvios padrão nas variáveis de interesse. **RESULTADOS E DISCUSSÕES**: as categorias e subcategorias mais comprometidas em relação às funções do corpo foram emoção, intestino e bexiga, sexualidade e força e tônus muscular. No domínio atividades e participação, as maiores dificuldades foram nas tarefas locomover-se; trabalhar; manter relações afetivas e sexuais e exercer seus direitos enquanto cidadãos. No domínio fatores ambientais classificou-se como facilitadores: família e amigos. As categorias classificadas como barreiras foram os profissionais de saúde. **CONCLUSÃO**: a aplicação da CIF em pessoas com lesão medular permitiu demonstrar uma série de limitações nesses pacientes, assim como elencou fragilidade em diversas áreas da vida das PCLM de forma a facilitar o processo de reabilitação.

Descriptor: Lesão medular; Classificação Internacional e Classificação Internacional de Funcionalidade, Incapacidade e Saúde, Incapacidade e Saúde.