86 - REHABILITATION AND TRAUMA: THE INTEREST OF THE SCIENTIFIC COMMUNITY

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INTRODUCTION:

The rehabilitation of patients with disabilities permits (i) to re-establish the fullest physical, psychological, social, vocational, avocational and educational potential consistent with their physiological or anatomic impairment and environmental limitations and (ii) to include in the activities related with jobs and a social and professional place in Society (PARZIALE, 2001; DITTMAR et al., 2004).

Patient with undesirable clinical conditions due to the diseases or due to lesions in armed conflicts, as trauma, stroke, amputation, arthritis, multiple sclerosis, orthopedic problems and other related illnesses is eligible to rehabilitation program (McLEOD et al., 2007). Rehabilitation frequently involves the services of several rehabilitation disciplines and the participation of an interprofessional team. The skills required depend on the nature of the patient's deficits. Clinical specialties commonly involved include physical medicine, neurology, geriatrics, internal medicine, psychiatry, physical education, physiotherapy, nursing and family practice (KUFE et al., 2003, SANTOS-FILHO et al, 2006). Physicians with other specialties, as well as, occupational therapist, psychologist and neuropsychologist, recreational therapist, and phonoaudiologist may be also required. Other professionals who commonly participate include social workers, nutritionists and specialists in sexual therapy (KUFE et al., 2003; BERNARDO-FILHO et al, 2007). In many programs, physicians and rehabilitation clinicians work together as an interdisciplinary team (KUFE et al, 2003).

A multiprofessional health team works with these patients to try to improve the quality of life, to maximize employability, independence, integration, and to increase the participation of people in the daily activities even with residual disability, even if, the impairment is caused by a pathologic process that cannot be reversed. A patient with a trauma, probably, should be submitted to a rehabilitation program (CICERONE, 2004; CRUISE and LEE, 2005).

People who recover completely from their diseases will not need rehabilitation, and other incapacitated will have benefits with a rehabilitation program. Between these extremes are people with varying degrees of disability. For these individuals, the goal should be to identify the best possible match between their needs and the available rehabilitation facilities (KUFE et al, 2003).

PubMed is a databank that includes over 18 million MEDLINE citations and additional life science journals for biomedical articles and has been used as a tool in various publications (MANTHEI et al., 2004; GOLDENBERG et al., 2005; MARMUR et al., 2004; SANTOS-FILHO et al., 2004; SANTOS-FILHO et al., 2005).

The interest of the scientific community in studies about rehabilitation due to the impairments of patients in several conditions is evident. The aim of this work was to evaluate the number of publications in rehabilitation and trauma using the PubMed.

METHODS:

The searches were performed in PubMed (http://www.ncbi.nlm.nih.gov/entrez/query.fcgi) in the period 1949 to 2008 using the words rehabilitation and trauma. The data was obtained in October 01, 2008. The number of publications, in each year, was determined in rehabilitation (PRH) and in rehabilitation and trauma (RAT).

The total number of citations in rehabilitation (PRH) in the studied period was determined. The percentage of citations to PRH per year, %PRH was calculated dividing the number of citations in PRH in each year by the total number of citations in rehabilitation for the period.

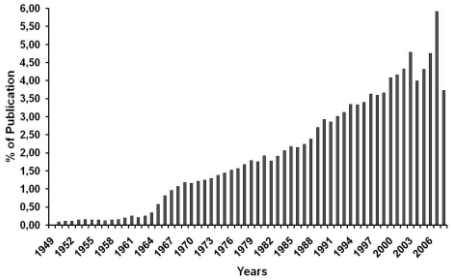
The total number of citations in rehabilitation and trauma (RAT) in the studied period was also determined. The percentage of citations to RAT per year, %RAT was calculated dividing the number of citations in RAT in each year by the total number of citations in rehabilitation and trauma for the period.

RESULTS:

The total number of publications cited in rehabilitation that were found in the PubMed in the studied period of time was 251594 and figure 1 shows the distribution of the percentage of papers published in rehabilitation (%PRH). The %PRH has increased from 0.01 (1949) up to 5.91 (2007).

The total number of publications cited in the PubMed in rehabilitation and trauma (RAT) in the studied period of time was 32467 and figure 2 shows the distribution of the percentage of papers published in rehabilitation and trauma (%RAT). The %RAT has increased from 0.00 (1949) up to 6.54 (2007). Moreover, only from 1963, publications in RAT were found.

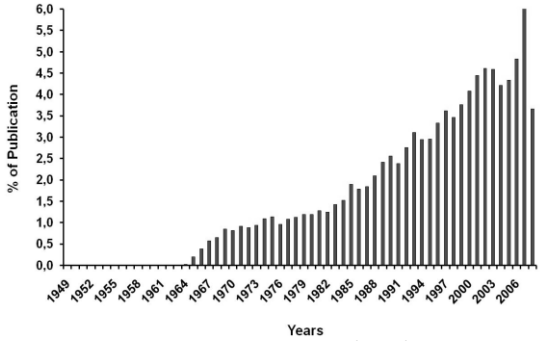
Figure 1: Distribution of the percentage of papers published in rehabilitation in PubMed in the period 1949 to 2008.



The total number of citations in rehabilitation (PRH) in the studied period was determined. The percentage of citations to PRH per year, %PRH was calculated dividing the number of citations in PRH in each year by the total number of citations in

rehabilitation for the period.

Figure 2: Distribution of the percentage of papers published in rehabilitation and trauma in PubMed in the period 1949 to 2008.



The total number of citations in rehabilitation and trauma (RAT) in the studied period was also determined. The percentage of citations to RAT per year, %RAT was calculated dividing the number of citations in RAT in each year by the total number of citations in rehabilitation and trauma for the period.

DISCUSSION:

Rehabilitation professionals have a relevant role to play in enhancing more positive attitudes towards disability. A commitment work in close alliance with persons with disabilities and their families is continuously performed, while the concept of independent living and full participation in the daily activities is to improve the life quality. Professionals that work in the field of rehabilitation need to add new skills to their traditional knowledge and values so that professional behavior becomes more oriented towards counseling and collaboration with families and communities (WHO, 2008).

PubMed (2008) is used as a tool in various publications, as (i) in a review about the genetic education internet sites and peer-reviewed medical literature to develop tables summarizing online resources for diabetes health professionals (MANTHEI et al., 2004), (ii) in a study of the available literature on missed trauma, focusing on overlooked muscoloskeletal injuries (PFEIFER and PAPE, 2008), (iii) in an investigation about the use of light-emitting technologies and photodynamic therapy for the treatment of basal cell carcinoma, squamous cell carcinoma and actinic keratoses (MARMUR et al., 2004), (iv) in evaluation of the interest in aging, prevention and health promotion (SANTOS-FILHO et al., 2006) and (v) in studies about cardiac rehabilitation (SANTOS-FILHO et al., 2005). The findings described in the Figure 1 and Figure 2 reinforces the importance of use of the PubMed as a tool to evaluate the scientific interest in a specific subject.

The increase of the percent of publication in rehabilitation shown in Figure 1 probably is related with undesirable conditions, as trauma (PARZIALE, 2001), stroke (CICERONE, 2004), amputation (DILLINGHAM and PEZZIN, 2005), arthritis (CIEZA and STUCKI, 2005), multiple sclerosis (KESSELRING, 2004), orthopedic problems (WOO et al., 2004) and other related illnesses. These conditions would be normally generated due to situations associated also with the daily activity of the Modern Life, as, stress, malnutrition and pollution. Moreover, the increase of publications in rehabilitation and trauma, probably, is related with the life conditions of the Modern life and the probability of someone undergo a trauma would be increased. Among the undesirable conditions associated with rehabilitation would be the treatment of patients with impairment due to armed conflicts (McLEOD et al., 2007).

In conclusion, the findings reported in this work show the relevance of the PubMed as a tool to evaluate the scientific interest in a specific subject. Furthermore, the increase of publications in rehabilitation could be related with several conditions, as those capable to generate trauma. The presence of an interprofessional team would be very important.

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REHABILITATION AND TRAUMA: THE INTEREST OF THE SCIENTIFIC COMMUNITY

The techniques used in rehabilitation aim to re-establish the physical, functional, psychological, social, vocational, avocational and educational potential of patients. A patient with a trauma, probably, should be submitted to a rehabilitation program with a supervision of an interprofessional team. PubMed is a database that is used as a tool in various publications. The aim of this work was to evaluate the number of publications in rehabilitation and trauma using the PubMed. The searches were performed (10/01/2008) in PubMed (http://www.ncbi.nlm.nih.gov/entrez/query.fcgi), from 1949 up to 2008 with the words rehabilitation and trauma. The number of publications was determined in rehabilitation (PRH) and in rehabilitation and trauma (RAT). The total number of citations in each subject was also determined. The percentage of citations to each subject (%PRH and %RAT) was also calculated. The number of publications in rehabilitation was 251594 and in rehabilitation and trauma were 32467. The %PRH has increased from 0.01 (1949) up to 5.91 (2007). Similarly, the %RAT increased from 0.00 (1949) up to 6.54 (2007). Moreover, only 1963 publications in RAT were found. The increase of the %PRH could be related with undesirable conditions (stroke, trauma, amputation, arthritis, orthopedic problems and other related illnesses), as well as with conditions of the Modern Life (stress, malnutrition and pollution). The increase of the %RAT could be related with the increase of the probability of someone undergoes a trauma. In conclusion, the findings reported in this work show the relevance of the PubMed as a tool to evaluate the scientific interest in a specific subject. Furthermore, the increase of publications in rehabilitation could be related with several conditions, as those capable to generate trauma. The presence of an interprofessional team would be very important.

Keywords: rehabilitation, PubMed, scientific community, trauma.

RÉHABILITATION ET DE TRAUMA: L'INTÉRÊT DE LA COMMUNAUTÉ SCIENTIFIQUE

Les techniques employées en réhabilitation ont pour but promouvoir le rétablissement du potentiel physique, fonctionnelle, psychologique, social et cognitive des patients. Souvent, le patient avec un trauma doit suivre un programme de réhabilation avec l'orientation d'une équipe multidisciplinaire. Par ailleurs, PubMed est la principale base de données utilisée comme outil par plusieurs publications. Dans ce contexte, ce travail a eu pour but d'évaluer le nombre de publications sur les thèmes Réhabilation et Trauma, à partir de la base de données PubMed. Des recherches bibliographiques (10/01/2008) dans PubMed (http://www.ncbi.nlm.nih.gov/entrez/query.fcgi), concernant les publications depuis 1949 jusqu'à 2008, ont été faites avec les mots-clés « Rehabilation » et « Trauma ». Le nombre de publications déterminé pour les textes seulement par mot-clé « Rehabilation » a été saisie comme PRH, tandis que la quantité de publications obtenue em prenant « Rehabilation » et « Trauma » a été noté comme RAT. Pour chaque mot-clé, le total d'articles a été aussi déterminé. Le pourcentage de citations pour chaque sujet (%PRH and % RAT) a été donc calculé. Ainsi, le Nombre total de publications recontrées par « rehabilation » a été 251594, pendant qu'en utilisant « Rehabilation » plus « Trauma », ce nombre a été 32467. Le %PRH a augumenté de 0,01 dans la prémière année recherchée (1949) jusqu'à 6,57, em 2007. D'autre part, le %RAT était zéro en 1949, passant à 6,54 en 2007. En outre, seulement 1963 publications en utilisant RAT ont été trouvées dans la même période. L'augmentation du %PRH pourrait être liée soit dû aux conditions non souhaitables (accident vascullaire cérébral, trauma, amputation, arthrite, problèmes orthopédiques, et d'autres maladies associées), soit dû aux conditions de la vie moderne (stresse, malnutrition et pollution). L'acrroissement du %RAT peut être associée à l'augmentation de la probabilité de l'individu être enprogramme de réhabiliation après avoir eu un trauma. En conclusion, les résultats raportés dans ce travail présentent l'importance de la PubMed comme un outil d'évaluation d'intérêt scientifique pour un sujet spécifique. De plus, l'augmentation du nombre des publications peut être liée à de nombreuse conditions, comme celles capables de générer un trauma. L'existence d'une equipe multidiciplinaire peut être très importante.

Mots-clés: Réhabilitation, PubMed, Communauté Scientifique, Trauma.

LA REHABILITACIÓN Y EL TRAUMA: EL INTERÉS DE LA COMUNIDAD CIENTÍFICA

Las técnicas empleadas en rehabilitación tienen por objetivo restablecer el potencial físico, funcional, psicológico, social y vocacional del paciente. Un paciente que ha sufrido un trauma, probablemente, será derivado a realizar un programa de rehabilitación bajo la supervisión de un equipo multidisciplinario. PubMed es una base de datos que es usada para buscar en varias publicaciones. El propósito de este trabajo fue evaluar el número de publicaciones en rehabilitación y trauma empleando esta base de datos. Las búsquedas fueron realizadas (10/01/2008) mediante PubMed (http://www.ncbi.nlm.nih.gov/entrez/query.fcgi), desde el año 1949 hasta el 2008 con las palabras claves rehabilitation and trauma (RAT). El número de publicaciones fue determinado con rehabilitación (PRH) y con rehabilitación y trauma. También fue establecido el número total de citaciones con cada palabra. Además fue calculado el porcentaje de citaciones para cada sujeto (%PRH y %RAT). El número de publicaciones en rehabilitation fue de 251594 y con rehabilitation and trauma fue de 32467. El %PRH incrementó de 0.01 (1949) hasta 5.91 (2007). Con similtud, el %RAT, creció de 0.00 (1949) a 6.54 (2007). Además, solo fueron encontradas 1963 publicaciones en RAT. El incremento del %PRH podría relacionarse con las patologías (AVC, trauma, amputaciones, artritis, problemas ortopédicos y otras enfermedades) asociadas a las condiciones de la vida moderna (stress, mala nutrición y contaminación). El incremento del %RAT podría deberse al incremento en las probabilidades de los individuos de sufrir un trauma. En conclusión, los hallazgos descritos en este trabajo muestran la relevancia de PubMed como una herramienta para evaluar el interés científico en determinados temas de estudio. Es más, el aumento de publicaciones en rehabilitación podría estar relacionado con varias condiciones capaces de generar traumas. La presencia de un equipo multidisciplinario sería muy importante.

Palabras clave: rehabilitación, PubMed, comunidad científica, trauma.

REABILITAÇÃO E TRAUMA: O INTERESSE DA COMUNIDADE CIENTÍFICA

As técnicas usadas em reabilitação objetivam restabelecer o potencial físico, funcional, psicológico, social, vocacional e educacional de pacientes. Um paciente com um trauma, provavelmente deveria ser submetido a um programa de reabilitação com uma supervisão de uma equipe interprofissional. PubMed é um sistema de dados que é usado como uma ferramenta em várias publicações. O objetivo desse trabalho foi avaliar o número de publicações em reabilitação e trauma usando o PubMed. As pesquisas foram realizadas (01/10/2008) no PubMed (http://www.ncbi.nlm.nih.gov/entrez/query.fcgi), de 1949 até 2008 com as palavras *rehabilitation* e *trauma*. O número de publicações foi determinado em reabilitação (PRH) e em reabilitação e trauma (RAT). O número total de citações em cada palavra foi também determinado. A percentagem de citações para cada palavra (%PRH e %RAT) foi também calculada. O número de publicações em reabilitação foi 251594 e em reabilitação e trauma foram 32467. O %PRH aumentou de 0,01 (1949) até 5,91 (2007). Similarmente, o %RAT aumentou de 0,00 (1949) até 6,54 (2007). Além disso, apenas 1963 publicações em RAT foram encontradas. O aumento da %PRH poderia estar relacionado com condições não desejáveis (acidente vascular cerebral, trauma, amputação, artrite, problemas ortopédicos e outras enfermidades relacionadas, assim como com condições da vida moderna (estresse, má-nutrição e poluição). O aumento da %RAT poderia estar relacionado com o aumento da probabilidade de alguém sofrer um trauma. Em conclusão, os achados reportados nesse trabalho mostram a relevância do PubMed como uma ferramenta para avaliar o interesse científico em um tema específico. Mais ainda, o aumento de publicações em reabilitação poderia estar relacionado com algumas condições, como aquelas capazes de gerar trauma. A presença de uma equipe interprofissional seria muito importante.

Palavras-chaves: reabilitação, PubMed, comunidade científica, trauma.