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The International Classification of Functioning, Disability and Health: progress and opportunities

A Classificação Internacional de Funcionalidade, Incapacidade e Saúde: progressos e oportunidades

Luana Talita Diniz Ferreira ¹ Shamyr Sulyvan de Castro ² Cassia Maria Buchalla ³

> **Abstract** The International Classification of Functioning, Disability and Health is a tool used to monitor individuals from a broad perspective, which considers not only their health but also the biopsychosocial aspects involved in the health-disease process. It offers a range of categories to describe the aspects of human functioning that interfere with the performance of activities, as well as the environmental aspects that facilitate or hamper participation, integration and consequently quality of life. This paper reports some of the experiments in the use of this classification as a way to foster its use and show the broad range of possibilities offered by this tool. The disclosure of usage strategies will make it more well-known and adopted, opening up new perspectives for the health care segment.

> **Key words** The International Classification of Functioning, Disability and Health, Rehabilitation, Disabled persons, Trends

Resumo A Classificação Internacional de Funcionalidade, Incapacidade e Saúde é uma ferramenta que serve para acompanhar o indivíduo sob uma perspectiva ampla que considera, além de sua condição de saúde, os aspectos biopsicossocias envolvidos no processo saúde-doença. Oferece uma gama de categorias para descrever aspectos envolvidos na funcionalidade humana, que interferem no desempenho das atividades, os aspectos do ambiente que facilitam ou impedem a participação, a integração e, portanto, a qualidade de vida. Este texto relata algumas experiências de uso dessa classificação, como forma de estimular seu uso e mostrar o leque de possibilidades que esta ferramenta permite. A divulgação das estratégias de uso deve torná-la mais conhecida e adotada, permitindo novas perspectivas para a área da atenção à saúde. Palavras-chave Classificação internacional de funcionalidade, Incapacidade e saúde, Reabilitação, Pessoas com deficiência, Tendências

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Introduction

The World Health Organization (WHO) proposes the use of the International Classification of Functioning, Disability and Health (ICF)¹ along with the International Classification of Diseases to describe the health conditions of individuals in a broader perspective.

The objective of this text is to introduce the classification and demonstrate ways in which to use it aiming at promoting the ICF and fostering its adoption and use by health care services.

Aging population, increasing medicalization and disease control make the available health information insufficient for the planning and assessment of health policies. People with chronic diseases may live for several years without monitoring the evolution of their condition, and without add any information useful for the health system to propose preventive interventions.

The ICF proposes an approach to the individual's health, or to the disabling process, through a biopsychosocial model that incorporates health components in physical and social levels. This proposal transcends the biomedical model based on disease etiology, evolving to a three dimensional model: biomedical, psychological and social. In this case, each level acts and suffers the actions of the others, and all of them are influenced by the environment². Figure 1 shows the proposed model and the interactions among its components.

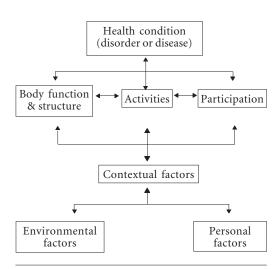


Figure 1. Explanatory chart of ICF components and their interactions¹.

The knowledge, comprehension and application of this new instrument are essential for a broader understanding of the processes experimented by the individual. In addition to suggesting an innovative model for the area, ICF offers a universal language, common to all of those who work with health or diseases.

Although this classification was approved in 2001¹, descriptions of its use were only published around 2004 reporting its clinical application in the form of abbreviated lists created to facilitate the use of this tool³⁻⁶.

ICF is currently used in several countries. In European countries, such as Germany and Switzerland, the Classification has also been used to justify rehabilitation in reimbursement requests made to health insurance companies. However, the study and use of ICF are fostered not only to ensure proper compensation to health care services. Based on international experiences, it is important to describe the epidemiological profile of persons with disabilities, to characterize the most frequent conditions and focus on specific care. ICF is useful to monitor patient evolution, for the granting of benefits (such as the "Benefício de Prestação Continuada" [Continuous Paying Benefits] used by the Brazilian Social Security), for decisions of the judiciary system and for the formulation and implementation of public policies.

The use of ICF in Switzerland and Germany, among other places, demonstrates an improvement in the communication among the team professionals, allows services to be readjusted to meet the needs of the population and optimizes the health care struture. In Brazil, its institutionalized use can facilitate the authorization of ambulatory and hospital procedures by the Brazilian Public Health System and by the health insurance companies, as well as help to design social inclusion policies. Furthermore, the use of the classification must be fostered so that the tool is completely explored and new applications are discovered.

Several strategies to the use of ICF have been created^{5,8}. One of the most successful was the core-sets production project led by the research group of the Biopsychosocial Health Department of the Institute for Health and Rehabilitation Sciences of the Ludwig-Maximilians-University (Munich, Germany), with the participation of researchers from several countries, including Brazil. This project created summarized lists of ICF codes for specific disease groups. The methodology proposed for these lists involved several

steps^{3,4} with consultation to literature and specialists, empirical data collections and a consensus with experts from all over the world for finishing the core set⁴.

The elaboration of a simplified instrument implemented the application and allowed a broad promotion of the Classification.

The application of the classification in the clinical practice has also been the object of researches. One example is the approach proposed by the "ICF Based Patient Education Stroke" (an Educational Program for Stroke Patients totally based on the ICF)9. In a pedagogical manner, the authors suggest a program that uses cards containing ICF categories selected from the core-set model for Stroke (Comprehensive ICF Core Set for Stroke)4. The patients, divided into groups of up to 4, are encouraged to select cards that contain the areas that present restrictions to their functioning. Then, they discuss their own limitations in the group and think about treatment possibilities or problem resolution strategies. The proposal is simple and can be carried out in 5 one-hour sessions9. In addition, this model can be used by people of any educational level if the cards use drawings instead of text.

Another form of application of the ICF, also based on a core-set related to spinal cord injury (Comprehensive ICF Core Set for Spinal Cord Injury)^{10,11}, is reported in the study of Rauch et al.¹². The paper proposes the implementation of 4 steps in the rehabilitation process: 1) Assessment; 2) Assignment; 3) Intervention; and 4) Reassessment, illustrated by a case study of a spinal cord injury patient to promote use of the tool by multidisciplinary teams. After the definition of the compromised areas, the different professionals of the team classified the patient's functioning using the qualifiers proposed by the ICF (digits that indicate, among other aspects, the severity of the condition) and assessed his/her condition at the time of admission and discharge. Tables were elaborated with the patient's assessments on two occasions, after 5 and 7 months, which enables directing the interventions¹². Thus, it was possible to follow the patient's evolution in a clear, concrete and qualitative way.

Some rehabilitation centers, as the Rehaklinik Bellikon (Switzerland) and Diakonie (Germany), have elaborated and make use of their assessment model based on the ICF. Each center uses its own model that directs intervention with its specific focus. The model of the Bellikon Rehabilitation Center is based on the classification's integrative model. In a more flexible way and

without coded items, the assessment considers personal factors, psychosocial aspects, functional changes and restrictions of activities and participation. These conditions are contained in a software created to join the information of each professional on a single chart. The information on this chart is associated to additional data from specific scales, such as the Functional Independence Measure (FIM) and the Barthel Index, among others.

On the other hand, in Diakonie, the ICF is used as a checklist to drive early intervention programs for children. The assessment, with the performance of the assessed child in an interactive environment recorded on video, is carried out by a multidisciplinary team in an interview with the parents. The checklist includes the subgroups of body functions, body structures, activities and participation as well as environmental factors which are qualified by means of a modified qualifier (scale of 1 to 5, meaning: 1 = needs support, but no disability or damage; 2 = disabled or insufficient; 3 = more researches or diagnoses are necessary; 4 = target area of care; 5 = not applicable). It is interesting to highlight that there is a practical difficulty in using ICF original qualifiers because they are subjective. However, their use is possible, as shown by the proposal of Rauch et al.12 and help to monitor the patient's evolution. The assessment in Diakonie is finalized after the team has discussed and selected the attention target items for therapeutic objectives.

The two last centers mentioned seek to discuss the patient approach by means of a single language, in addition to justifying the costs with the rehabilitation process to health insurance companies.

One example of assessment directed by the ICF model is illustrated by a case study of a patient monitored in the Adult Physiotherapy Department from the Rehabilitation Center of Associação de Assistência à Criança Deficiente (Association for Assistance of Disabled Children, São Paulo, Brazil) (Figure 2). The patient M., 27 years, female, victim of traumatic brain injury, 8 years after lesion, in rehabilitation due to postoperative surgery for the treatment of heterotopic ossification in the hips, comes to the rehabilitation center with the personal goal of increasing her gait independence in domestic and external environments. The model was used to direct the therapeutic objectives considering the restrictions of activities and participation, which were both the patient's and her mother's main complaints.

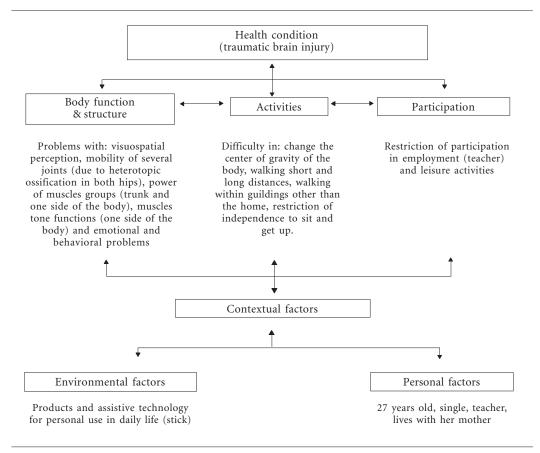


Figure 2. Example of the use of ICF in a patient in rehabilitation.

It is possible to note the quantity of information related to the patient's health and conditions enabled by the model. In an integrated way, ICF serves as a roadmap to define appropriate therapies and specific objectives, allows monitoring the case evolution and facilitates the team comprehension on how to deal with the patient.

These examples show that the suitability of the use of the ICF depends on the objective (assessment/reassessment/classification), the purpose (explanation of costs, administrative results for purposes of hospital and ambulatory statistics), the professional(s) using it (doctors, physiotherapists, nurses, psychologists, nutritionists, speech therapists, educators and other health professionals) and on the health care focus.

Health care professionals, as well as health care services of the country, must be familiar with the broad range of possibilities in the application of this tool. The adoption of the ICF by an increasing number of services and public policies systems and its incorporation into the curricula

of the health care sector, contemplating the integrative model, will result in more efficient and effective treatments and a higher quality of life for the patients.

The reading and exploration of the Classification by health professionals allow the proposal of uses adapted to the needs of each health care service. The use of checklists and core sets, as well as of specific models, should be stimulated, but creativity may allow for new and different ways for its application.

ICF must be recognized as an invaluable universal framework for classifying the personal health components, instead of a simple classification system as Tesio's report¹³. Therefore, the professional education must be driven towards the aspect of a globalized health assessment, aiming at the analysis of the impact of diseases in the world and promoting more effective interventions.

ICF has been internationally recognized as a useful tool and its use is becoming a global trend. Thus, if Brazil wishes to maintain its stature as a

country whose health care system strikes the world for its complexity and capacity of universality, comprehensiveness and equity, it must incorporate this classification system into its practices in all levels of health care for the population.

Collaborations

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References

- World Health Organization (WHO). International Classification of Functioning, Disability and Health. São Paulo: EDUSP; 2003.
- Farias N, Buchalla CM. A classificação internacional de funcionalidade, incapacidade e saúde da organização mundial da saúde: conceitos, usos e perspectivas. Rev Bras Epidemiol 2005; 8(2):187-193.
- Cieza A, Ewert T, Üstün TB, Chatterji S, Kostanjsek N, Stucki G. Development of ICF Core Sets for patients with chronic conditions. *J Rehabil Med* 2004; 44(Supl.):9-11.
- Geyh S, Cieza A, Schouten J, Dickson H, Frommelt P, Omar Z, Kostanjsek N, Ring H, Stucki G. ICF Core Sets for Stroke. *J Reabil Med* 2004; 44(Supl. 1):135-141.
- Rauch A, Cieza A, Stucki G. How to apply the International Classification of Functioning, Disability and Health (ICF) for rehabilitation management in clinical practice. Eur J Phys Rehabil Med 2008; 44(3):329-342.
- Bernabeu M, Laxe S, Lopez R, Stucki G, Ward A, Barnes M, Kostanjsek N, Reed G, Tate R, Whyte J, Zasler N, Cieza A. Developing Core Sets for persons with Traumatic Brain Injury based on International Classification o Functioning, Disability and Health. Neurorehabil Neural Repair 2009; 23(5):464-467.
- Rentsch HP, Bucher P, Dommen Nyffeler I, Wolf C, Hefti H, Fluri E, Wenger U, Walti C, Boyer I. The Implementation of the 'International Classification of Functioning, Disability and Health'(ICF) in Daily Practice of Neurorehabilitation: an Interdisciplinary Project at the Kantonsspital of Lucerne, Switzerland. Disabil Rehabil 2003; 25(8):411-421.
- Sampaio RF, ManciniMC, Gonçalves GGP, Bittencourt NFN, Miranda AD, Fonseca ST. Aplicação da International Classification of Functioning, Disability and Health (ICF) na prática clínica do fisioterapeuta. Rev Bras Fisioter 2005; 9(2):129-136.

- Neubert S, Sabariego C, Stier-Jarmer M, Cieza A. Development of an ICF-based patient education program. Patient Educ Couns 2011; 84(2):13-17.
- Cieza A, Kirchberger I, Biering-Sørensen F, Baumberger M, Charlifue S, Post MW, Campbell R, Kovindha A, Ring H, Sinnott A, Kostanjsek N, Stucki G. ICF Core Sets for individuals with spinal cord injury in the long-term context. Spinal Cord 2010; 48(4):305-312.
- 11. Herrmann KH, Kirchberger I, Stucki G, Cieza A. The Comprehensive ICF core sets for spinal cord injury from the perspective of physical therapists: a worldwide validation study using the Delphi technique. *Spinal Cord* 2011; 49(4):502-514.
- Rauch A, Escorpizo R, Riddle DL, Eriks-Hoogland I, Stucki G, Cieza A. Using a case report of a patient with Spinal Cord Injury to illustrate the application of International Classification of Functioning, Disability and Health during multidisciplinary patient management. *Phys Ther* 2010; 90(7):1039-1052.
- 13. Tesio L. From codes to language: is the ICF a classification system or a dictionary? *BMC Public Health* 2011; 11(Supl. 4):S2.

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