

ORIGINAL ARTICLE

The use of the International Classification of Functioning, Disability and Health in the physical therapy assessment of individuals with musculoskeletal disorders of the lower limbs and lumbar region

Utilização da Classificação Internacional de Funcionalidade, Incapacidade e Saúde na avaliação fisioterapêutica de indivíduos com problemas musculoesqueléticos nos membros inferiores e região lombar

¹George Schayer Sabino, ²Cecília Martins Coelho, ³Rosana Ferreira Sampaio

ABSTRACT

Introduction: The structure and contents of the International Classification of Functioning, Disability and Health (ICF) can contribute to the physical therapists' clinical practice management and systematization. Although promising, its use is still limited, especially due to the complexity of its application. The aim of this study was to analyze the difficulties related to the use of the ICF to codify activities/participation of patients with musculoskeletal disorders in the lower limbs and lumbar region, evaluated by a physical therapist. **Methods:** Reports of patients related to the activities/participation that were altered due to musculoskeletal disorders were used. Data were obtained from the charts and grouped into categories for subsequent coding. **Results:** Five ICF domains were used to describe the altered activities/participation (mobility, self-care, domestic life, major life areas and community, social and civic life) and four difficulties related to the coding process were identified: (1) multiple codes related to some activities/participation; (2) inaccurate code to detail one activity/participation (run distance); (3) "unspecified" code used for the classification of "getting into the car"; (4) generic codes attributed to activities/participation that refer to sports. **Discussion:** The possibility of choosing several codes to describe the same condition due to the overlap and interrelation of activities/participation can make the classification process inconsistent in some situations. The absence of detailing concerning some activities/participation can restrict the precision of categorization and data documentation. **Conclusion:** The ICF allowed the characterization of the health status of individuals, but presented some issues that must be considered in order to obtain its improvement.

KEYWORDS

International Classification of Functioning, Disability and Health, disability evaluation, musculoskeletal diseases, lower extremity, physical therapy (specialty)

RESUMO

Introdução: A estrutura e o conteúdo da Classificação Internacional de Funcionalidade, Incapacidade e Saúde (CIF) podem contribuir para a orientação e sistematização da prática clínica do fisioterapeuta. Apesar de promissor, seu uso ainda é limitado, principalmente devido à complexidade de sua aplicação. O objetivo deste estudo foi analisar as dificuldades encontradas no uso da CIF para codificar atividades/participação de pacientes com problemas musculoesqueléticos nos membros inferiores e na região lombar avaliados por um fisioterapeuta. **Métodos:** Foram utilizados os relatos dos pacientes quanto às atividades/participação alteradas em decorrência de problemas musculoesqueléticos. Os dados foram coletados dos prontuários e agrupados em categorias para codificação posterior. **Resultados:** Cinco domínios da CIF foram utilizados para descrever as atividades/participação alteradas nesses indivíduos (mobilidade, cuidados pessoais, vida doméstica, áreas principais da vida e vida comunitária, social e cívica) e foram identificadas quatro questões relacionadas à codificação: (1) códigos múltiplos para algumas atividades/participação; (2) código impreciso para detalhar uma atividade/participação (distância corrida); (3) código "não especificado" para classificar o "entrar no carro"; (4) códigos genéricos para atividades/participação que se referem a esportes. **Discussão:** A possibilidade de seleção de vários códigos para uma mesma condição,

1 Physical therapist and Master in Rehabilitation Sciences by Universidade Federal de Minas Gerais; Professor of Centro Universitário Newton Paiva, Belo Horizonte, MG

2 Physical Therapist and Post-graduate Student in Ergonomics at Universidade Federal de Minas Gerais

3 Physical Therapist by Faculdade Ciências Médicas de Minas Gerais and Ph.D. in Public Health by Universidad Autonoma de Barcelona; Professor at the Department of Physical Therapy, School of Physical Education, Physical Therapy and Occupational Therapy at Universidade Federal de Minas Gerais

MAILING ADDRESS:

George Schayer Sabino

Rua Roquete Mendonça, 408 - Pampulha - Belo Horizonte/MG - Cep 31275-030 - E-mail: george@propulsao.com

decorrente da superposição e inter-relação de atividades/participação, pode tornar a classificação inconsistente em algumas situações. A ausência de detalhamento para algumas atividades/participação pode limitar a precisão na categorização e documentação das informações. Conclusão: A CIF possibilitou a caracterização do estado de saúde dos indivíduos, mas apresenta algumas questões que devem ser consideradas para seu aperfeiçoamento.

PALAVRAS-CHAVE

Classificação Internacional de Funcionalidades, Incapacidades e Saúde, avaliação da deficiência, doenças musculoesqueléticas, extremidade inferior, fisioterapia (especialidade)

INTRODUCTION

Precise and consensual information are necessary for the planning, decision-making and analysis of trends in the health area, in the national as well as in the international setting. Aiming at attaining these objectives, several countries have used the tenth review of the International Statistical Classification of Diseases and Health-related Problems (ICD-10), developed by the World Health Organization (WHO) to report the causes of death and supply information on the incidence and prevalence of diseases.¹⁻³ However, the ICD-10 is not capable of fully demonstrating the real status of the population, considering that, as defined by the WHO, health must be understood as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”.⁴

Aiming at formulating a new and universal language for the communication in health, the WHO started the development of a classification to comprise the aspects that were not included in the ICD-10. In 1980, the International Classification of Impairments, Disabilities, and Handicaps, or ICIDH, was created to classify the consequences of non-fatal diseases.^{3,5-7} The ICIDH, developed experimentally, was still too associated with disease, as it described the individuals' impairment and not the “well-being”, or the functionality in a neutral setting.^{3,8}

In 1993, a review process of the ICIDH was initiated, and successive versions were proposed aiming at encompassing the scope of health and human functionality and adequate the classification system to different cultures and languages. A new method of classification based on health components started to appear, to the detriment of the disease consequences and, in December 2000, the final version started to be called the “International Classification of Functioning, Disability and Health” (ICF).^{3,5}

After its approval at the 54th World Health Assembly in May 2001, the ICF started to integrate the Family of International Classifications of the WHO.⁵ For the first time in the history of health, there was a theoretical model accompanied by a classification for functionality.⁹

The ICF organizes the information in two parts. The first part is called “functionality and impairment” and has two components: “body functions and structures”, related to the physiological functions of the organic systems and anatomical body parts, respectively; and “activities and participation”, which includes the activities, i.e., the carrying out of a task or action, and the participation, related to

the individual's involvement in a life situation. The second part of the ICF presents the context factors (environmental and personal factors) that interact with the previous constructs.⁵

It is known that the words used by people structure their way of thinking, their decisions and actions.¹⁰ Thus, the emergence of a new universal language capable of informing on functionality, impairment and health has a great impact on professions that focus on such issues, such as Physical Therapy.¹¹⁻¹⁴

The disease presented by the patient, although relevant for the definition of the physical therapy conduct, is only one of the many data recorded during the anamnesis and must not be used exclusively to direct the treatment, considering the quantity and diversity of alterations in body structure/ function, activity and participation that the same health condition can cause.^{12,13,15} If the physical therapists base their conduct exclusively on the biomedical model, the ICD-10 base, they will be focusing their actions on the disease and the symptomatology, aspects that are not in direct agreement with their professional objective and that are equally insufficient to demonstrate the improvements obtained with the treatment.^{10,16} An individual will be kept on presenting, for instance, a nosologic diagnosis of “insulin-dependent diabetes mellitus”¹¹ after a physical therapy intervention that will improve functionality and quality of life.

The structure and the content of the ICF are, therefore, capable of helping the physical therapists record the functional data, define the intervention targets and document the outcomes, allowing the implementation of a new model to guide the clinical practice.^{3,5,15}

In addition to being necessary from the practical and clinical point of view, this type of classification is important from the economical point of view, as it favors the distribution of resources that are compatible with the real necessities of the service.^{11,13,17}

The physical therapists, in their daily practice, are in contact with individuals that present an assortment of clinical pictures, including problems related to the lower limbs and lumbar region, such as halux valgus, plantar fasciitis, flat foot, diabetic foot, rheumatoid arthritis, patellar syndromes, knee osteoarthritis and lumbar pain, in cases where there are biomechanical effects on the column. Among the conditions often observed in patients with musculoskeletal problems in the lower limbs and lumbar region, an even larger number of functionality alterations can occur. A patellar syndrome, for instance, can limit a lady's capacity to kneel at religious services, impairing her social functions, but it might not have the same impact on the life of a young individual, who does not have the same habits.

These functional impairments can be classified by the ICF, but the variety of these impairments and, consequently, the large number of possible codes, can make this process complex and sometimes, inaccurate.^{14,17,18}

The use and dissemination of a classification system such as the ICF depends on its acceptance by the health professionals and of characteristics such as practicality and easy applicability.^{7-9,13,15} Although promising, the ICF has low application reliability¹⁷ and its use in clinical practice and research is still limited. One limiting factor pointed out by literature is exactly the difficulty in selecting

the codes among the large amount of codes in the classification, which hampers its use and restricts data comparison between studies.^{14,17,18}

Another challenge regarding the ICF is related to its hierarchical structure. The ICF is organized as independent components that ramify in mutually exclusive categories of different levels.⁵ Although it helps the health professionals to understand the position of the code, this hierarchical structure transforms the results in long codes, which can limit their flexibilization.⁸

Some strategies to make the ICF easier to use have been developed, such as the use of core sets, which correspond to a selection of the minimum of the codes related to a specific health condition, capable of making the ICF use practical and comprehensive.¹³ Despite the efforts made by the WHO, some authors consider that there is no consensus regarding the use of the ICF codes.¹⁷

The ICF is still under construction, but it is going towards the consolidation of its use in the health area. Validation studies have demonstrated its adequacy to the intervention targets and its consistency regarding the objectives by different health professionals involved with rehabilitation, in spite of the limitations concerning the reliability.^{14,17}

The future development of the ICF can benefit from studies directed at the identification of questions and difficulties found throughout this codification process.⁸

OBJECTIVES

The objective of the present study was to analyze the difficulties of using the ICF to codify the activities/participation with limitation/restriction in patients with musculoskeletal problems in the lower limbs and lumbar region, evaluated by a physical therapist.

METHODS

The sample consisted of individuals with musculoskeletal problems in the lower limbs and lumbar region, evaluated by a physical therapist in an office specialized in gait analysis and lower limb biomechanics, in Belo Horizonte/MG, from 2005 to 2007, selected by convenience through the analysis of medical files.

The patients' data were collected by qualitative methods, through semi-structured interviews. The information on which activities/participations were limited and restricted, spontaneously reported by the patients, were recorded in the medical files during the evaluation. When no activity/participation was mentioned, the physical therapist asked the patient to report the main activities/participations that were altered after the onset of the health problem. The recorded activities/participations were grouped in categories and codified according to the ICF.

As each domain of the ICF presents a hierarchic structure in which the increase in the number of digits corresponds to a more specific activity/participation¹⁷, the highest possible level of detailing was used to accurately characterize the activity/participation reported by the patients. The items recorded as "no alteration"

represented the patients that reported no limitations or restrictions in activities/participations due to their health problems.

A descriptive analysis of the general characteristics of the studied sample was carried out, as well as of the domains and categories of the activity/participation components that presented limitations/restrictions. The main difficulties observed during the process of codification were demonstrated.

RESULTS

The medical files of 30 patients, aged 13 to 71 years (median: 43 years), most of whom females (17), were selected. Regarding the affected region, 14 individuals presented a knee dysfunction, 7 reported foot problems, 4 had problems in the lumbar region, 4 in the ankle and in had problems in the calf region.

The most often reported activities/participations were: walking/strolling (14 patients), going up or downstairs (9 patients), running (6 patients), crouching (5 patients). Additionally, several other individual reports were identified: playing badminton, traveling, dancing, sweeping the floor, getting into the car, working, mopping, practicing sports, bending forward (the trunk), playing soccer and doing hydrogymnastics. Two patients reported no alterations in their activities/participations due to their health problems. The activities/participations mentioned by the patients and their respective codes are shown in Chart 1.

Among the nine chapters of the Activities and Participation component, five were related to the patients' reports, according to the information in Chart 2.

During the codification process, four important points to be considered in the process of ICF development were verified:

1) Difficulty regarding the definition of a single code capable of comprehending some limitations and restrictions reported by the patients, as verified for "walking/strolling". The "walking/strolling" can be classified by the code d450, which represents the activity of walking on a surface on foot, but also by the code d460, which is described in ICF as moving around different places and also by the code d570, which refers to caring after one's health. Consequently, there are different ways to codify "walking/strolling" according to the impact of the problem on specific aspects of the individual's functionality. The following similar situations also occur in the following activities/participation: "running", "performing professional activity", "dancing", "playing soccer", "playing badminton" and "attending hydrogymnastics classes", in which more than one ICF code could be related to each item (see Chart 1);

2) Lack of a specific code for the varied distances that the patient can achieve when running;

3) Loss of the specificities related to the activity "get into the car" after the codification, due to the need of classifying it as "another specified" item;

4) Loss of specificities related to some activities performed by the patients, such as "dancing", "playing soccer", "playing badminton" and "attending hydrogymnastics classes", due to the necessity of using general codes related to healthcare, the practice of sports and/or performing professional activity, without detailing the inhe-

Chart 1

Activities/participation reported by the patients as being limited or restricted, codified according to the International Classification of Functioning, Disability and Health (ICF).

Activity or participation	ICF Code*	Description of the ICF* code
Walking, strolling	d450	Walking: to move on a surface on foot, step by step, in a way that one foot is always on the ground (...).
	d460	To go around different places: to walk to move around several places in different situations, such as walking from room to room in the house, inside a building or on a street.
	d570	Care after one's health: to guarantee physical comfort, health and physical and mental well-being, how to maintain a balanced diet, appropriate level of physical activity (...).
Running, running short distances	d4552	Running: to move with quick steps in a way that both feet might be simultaneously off the ground.
	d570	Care after one's health: to guarantee physical comfort, health and physical and mental well-being, how to maintain a balanced diet, appropriate level of physical activity (...).
	d920	Recreation and leisure: participate in any form of game, recreation or leisure activity, such as games or informal or organized sports, physical exercise programs (...).
Forward/lateral bend	d4105	To bend: incline the back downwards or sideways (...).
Going up or downstairs	d4551	Climb: move the body upwards or downwards on surfaces or objects, such as climb stairs, rocks, fixed or portable ladders, curbs or other objects.
Squatting	d4101	To crouch: to crouch and get up from a sitting or crouching position on one's hip with the knees together or sitting on one's heels (...).
Entering a car	d4108	To change the basic body position, to another specified one.
	d489	To move using means of transportation, other specified and unspecified ones.
Mopping, sweeping	d6402	Clean the house: clean the interior of the house, such as dusting, sweeping, moping, cleaning.
Performing professional activity	d845	To get, maintain and leave a job: to look for a job, find a job, choose a job, be hired and accept the job, maintain a the job and progress in it (...).
	d850	Remunerated work: participate in all aspects of work, such as an occupation, business, profession or another type of employment, in exchange for payment (...)
Travelingt	d920	Recreation and leisure: participate in any type of game, recreation or leisure activity (...) go on field trips, tourism or travel for pleasure.
Dancing, playing soccer, playing badminton, attending hydrogymnastics classes	d570	Care after one's health: to guarantee physical comfort, health and physical and mental well-being, as well as keeping a balanced diet, appropriate level of physical
	d845	activity (...).
	d850	To get, maintain and leave a job: to look for, find and choose a job, to be hired and accept the job, maintain a job and progress in it.
	d9201	Remunerated work: participate in all aspects of work, such as an occupation, business, profession or another type of employment, in exchange for payment (...).
		To practice sports: to participate in formally or informally organized sports or athletic competitions alone or in groups, such as bowling, gymnastics or soccer.

* WHO. ICF: International Classification of Functioning, Disability and Health (ICF). São Paulo: EDUSP; 2003.

rent characteristics of the type of physical activity with limitation.

DISCUSSION

A aplicação do sistema de classificação da CIF em diversas po-
The use of the ICF classification in several populations is currently
a theme for discussion in the health area.^{3,17,19} In the present study,
we chose to analyze the limitations of the activities/participation in
patients with lower limb and lumbar region dysfunctions, instead
of evaluating the limitations related to a disease, as some studies

have been doing²⁰⁻²³, as one same activity or participation can be
impaired in individuals presenting different health conditions.⁸

The ICF components “body function and structure” and “envi-
ronmental factors” were not included in the present study, in spite
of its association with functionality.^{5,11,24} The components of body
function and structure were not the focus of this study, as they in-
volve elements that have been traditionally studied according to the
biomedical model.^{13,24} Furthermore, these components have a lower
possibility of detailing⁸ and, consequently, present fewer discrepan-
cies. However, it is worth mentioning that the association between
the dysfunctions in body structures and functions and the alterations

Chart 2

Chapters of the Activities and Participation component of the International Classification of Functioning, Disability and Health (ICF) and its association with the reports of patients with musculoskeletal problems in the lower limbs and lumbar region.

ICF Component	Chapter number	Chapter title
Activities and Participation	1	Learning and use of knowledge
	2	General tasks and obligations
	3	Communication
	4	Mobility*
	5	Personal Care *
	6	Home life *
	7	Personal interactions and relationships
	8	Main areas of life*
	9	Community, social and civic life*

* Chapters related to patients' reports.

in the activities and participations must not be established a priori, but must be analyzed for each case. The environmental factors, on the other hand, could not be evaluated, as this information was not available in the patients' assessments. The ICF provides conditions to carry out their recording, thus allowing the determination of to what extent these environmental factors act as barriers or facilitating factors for the individual.⁵

In order to characterize the limitations/restrictions, the ICF manual recommends the use of at least one qualifier, which is a number inserted after the code, separated by a period that refers to the condition of the classified characteristic.^{5,8} For instance, the code d4500.3, indicates a "moderate restriction in performing the activity "walking short distances". As the ICF is a neutral classification, the use of qualifiers is what gives sense to the impact of the disease on a specific category. Despite the importance of the qualifiers, some authors consider that their use adds time and complexity increases to the process of codification, in addition to generating discrepancies between the results obtained by different examiners.^{8,17}

Considering that the present study aimed at verifying questions related to the selection of ICF codes, the qualifiers were neither used, nor analyzed.

The most frequent category of the activity/participation component identified in the present study was related to walking, which might have been influenced by the fact that the patients were selected from a medical office specialized in gait analysis.

As the lower limbs are the base of the body support and allow support and mobility, a problem in this segment consequently tends to impair the capacity to ambulate. Nevertheless, it is important to observe that this implication is not a rule, as the patient might not, even when he or she presents musculoskeletal problems in the lower limbs, report any modification in their activities/participation, as observed in two individuals.

The patient can also presents specific limitations, such as observed in the present study, in which most of the categories of the activities/participation component with limitations/restrictions were mentioned only once. As demonstrated by Sampaio et al¹² in a

study on the use of the ICF carried out in Brazil, there is no direct association between a certain pathology and the resulting activities/participation alterations. Each patient presents, therefore, a complex set of characteristics, which requires a detailed assessment by the healthcare professional.

It can be observed in the results that, among the nine chapters of the ICF activities/participation components, only five appeared in the patients' reports (Chart 2) and in four of these chapters, only one or two codes were selected. Chapter 4, related to mobility, was the one that presented the highest number of categories related to the patients' report (Chart 1). Aspects concerning learning, tasks and requirements, communications, interactions and interpersonal relationships were not reported in this sample or were not selected by the examiner in charge of the information codification; however, these factors can be reported by other patients with the same health condition.¹¹

In routine clinical practice, it is not necessary for the health professionals to report to all ICF codes to apply it to their patients, but only to a fraction of the categories.⁷ Finger et al¹¹ carried out a research with the objective of identifying the ICF categories related to the most common and relevant problems for the clinical context of the physical therapist. The categories observed in this study were present among the ones cited in the aforementioned study¹¹, presenting a divergence in only two of them. The items "To move using means of transportation, other specified and unspecified ones" (d489) and "driving" (d475) were not listed in the study by Finger et al,¹¹ but a similar code was selected, concerning the "use of means of transportation" (d470). The item "remunerated work" did not appear the aforementioned study¹¹ either, but the occupational issue was addressed through the item "acquire, maintain and leave a job", also mentioned in this study.

The physical therapists interviewed by Finger et al¹¹ reported five activities that were not observed in the present study: administrate time and plan several activities throughout the day, deal with stress and other psychological burdens, maintain the body in the same position during the necessary time, get up and carry objects and care after parts of the body. The different categories identified in the two studies can be due to the employed methodology. Finger et al¹¹ considered the opinion of the physical therapists concerning the codes that would be relevant for their practice and not the selected categories based on the patients' perception, as their objective would be to select the classifications considered more relevant for the professionals.

The information collected by the physical therapists can be obtained through assessment tools of interviews.¹³ Several researchers have sought to correlate the results obtained through the use of standardized tools with ICF items.^{25,26} In the study by Sampaio et al,¹² functionality was assessed through the use of standardized tools, translated and adapted to the Brazilian population. The current study data, however, were collected by qualitative methods, through semi-structured interviews, which allowed the patients to describe their perception regarding the impact of the health condition on their lives, contemplating aspects that could be comprehended through the use of another methodology. Studies are currently being

developed about the use of the patients' reports to define the ICF categories which, in the patients' perspective, are the most relevant and significant for their lives²⁷.

The first difficulty regarding the process of codification by the ICF identified in the present study was related to the possibility of using more than one code to classify some categories of the activities/participation components. Walking, as well as running, presented two classification possibilities, being one code related to the activity, that is, to the kinesiological concept of these actions (codes d450 for walking and d4552 for running) and a second code related to participation, i.e., involving a life situation (code d460 for walking and d920 for running). Such items could still be classified by a third code, related to "care after one's health" (d570), depending on the meaning given by the patient for the activity/participation in his/her life and the examiner's interpretation. The code d570, however, is not restricted to walking or running; it encompasses several other activities that contribute to the maintenance of health as well as the physical and mental well-being, such as for instance, to have a healthy diet and guarantee one's own physical comfort. The professional, at the moment of the evaluation, can investigate whether the patient is reporting a specific activity such as walking or running, or the care after one's health in a more comprehensive way.

As for performing a professional activity, two codes were identified that fitted the conditions described by the patients, one concerning the participation in work activities (d850) and another related to job maintenance (d845). The activities related to sports practice (dancing, playing soccer, playing badminton and attend hydrogymnastics classes) also presented individually more than one possibility of codification.

The specific codes for each patient could have been defined at the moment of the anamnesis, but in the present study, the codification was carried out based on the information obtained from the files. Regardless of how the data were obtained, it is possible to verify that more than one code can be used as reference for the patient's report in the mentioned situations.

The possibility of selecting more than one code for the same condition was verified in the study by Bales et al¹ that emphasized the difficulty to clearly define, between two or more codes, which is the most adequate in some situations. There are also reports in the literature on the difficulty of distinguishing between the items related to the activity and participation separately.²⁴ The aspects concerning the activity and participation are so interrelated that the ICF itself presents these items grouped in a single list of domains and refers to the possibility of overlapping of these codes.⁵ The existence of distinct codes for a same condition can make the classification inconsistent in some situations. The examiner could select the code that he or she considers more adequate to the situation, but this form of classification is subject to the influence of aspects concerning the examiner's subjectivity, which can result in a great variability, i.e., different codes can be chosen by different examiners to characterize the same condition. As the ICF is not a "classification of events" as the ICD-10, in which a single category is attributed to the health condition, it is also possible to associate

the codes.⁵ Nevertheless, this possibility further increases the complexity of the ICF use.

The second question observed during the codification was related to the activity of running short distances, which was considered as "running", in general, as the ICF does not have a specific code for this specific variation of the category, as there is for walking, which can be classified by the code d4500 (walking short distances) or by the code d4501 (walking long distances). The absence of this detailing for running can restrict the precision of the codification. This consideration is important, if we regard that running is currently one of the most commonly performed forms of physical exercise due to its being so practical.²⁸ Bales et al⁸ stress that the simplification generated by the system of classification generates loss of information on the real conditions of the patient, as some important elements might not be apprehended by the code description. The ICF was, however, developed with the objective of supplying several disciplines in order to allow the communication and comparison of data among several countries, services and periods,⁵ which can be related to the restrictions of its clinical refinement.

The third question related to the classification is related to the inexistence of a category capable of describing the activity of "getting into the car". The item related to driving (code d475) does not include "getting into and out of the car" and the classification related to "sitting down" (code d4103) does not comprehend the condition reported by the patient being assessed. The codes related to "To move using means of transportation, other specified and unspecified ones" and "To change the basic body position, to another specified one" allowed the classification of the activity described as "another specified one" item. The categories related to the "another specified one" are present in all domains of the ICF in order to be used in situations that do not fit the descriptions of the existing codes. The ICF also allows the use of the "non-specified" classification, which allows the codification of the aspects of functionality that adjust to a group, but are not sufficient to determine a more specific category.⁵ An alternative form of classification for "getting into the car" would be through the use of a more comprehensive code – change the basic body position (d410), but the choice of this code would result in the decrease of the detailing level of the activity and consequently, in the impairment of its specificities. Comprehensive items and non-specific ones help the classification of little frequent and unlikely elements, but the use of these items can generate semantic accumulations and increase the discordance in the choice carried out by the examiners.^{8,17}

The fourth relevant consideration on the ICF use verified in the present study is related to the activities of dancing, playing soccer, playing badminton and attending hydrogymnastics classes. Despite the several codification possibilities for these activities, the selection of any of the codes, for instance the code d9201 (practicing sports), generates loss of important information on the specificities of the activity performed by the patient.

CONCLUSION

The ICF allows the characterization of the functionality of

individuals with musculoskeletal problems in the lower limbs and lumbar region, but some issues were identified that need to be considered for its improvement, related to the multiplicity of codes for the same condition and the presence of imprecise and/or comprehensive codes. The use of the ICF in training centers, in clinical practice and in research can contribute to its future review, such as occurred with the successive versions of the ICD, promoting modifications in the classification towards the improvement in the description and structuring of its categories, as well as the perfecting of aspects related to the practicality and accuracy of its use.

REFERENCES

1. Organização Mundial da Saúde. CID-10: Classificação Internacional de Doenças e problemas relacionados à saúde. 10 rev. São Paulo: Centro Colaborador da OMS para a Classificação de Doenças em Português; 1993.
2. WHO. World Health Organization Family of International Classifications [texto na Internet]. Geneva: [citado 11 Abr 2007]. Disponível em: <http://www.who.int/classifications/en/WHOFICfamily.pdf>
3. Üstün TB, Chatterji S, Bickenbach J, Kostanjsek N, Schneider M. The International Classification of Functioning, Disability and Health: a new tool for understanding disability and health. *Disabil Rehabil.* 2003;25(11-12):565-71.
4. WHO. Constitution of the World Health Organization [texto na Internet]. Geneva: WHO/SEARO [citado 11 Abr 2007]. Disponível em : <http://www.searo.who.int/aboutsearo/pdf/const.pdf>
5. OMS. CIF: Classificação Internacional de Funcionalidade, Incapacidade e Saúde. São Paulo: EDUSP; 2003.
6. ICIDH-2: International Classification of Functioning and Disability. Beta-2 draft, Full Version. Geneva: World Health Organization; 1999.
7. Üstün B, Chatterji S, Kostanjsek N. Comments from WHO for the Journal of Rehabilitation Medicine Special Supplement on the ICF Core Sets. *J Rehabil Med.* 2004;36(44 Suppl):7-8.
8. Bales ME, Kukafka R, Burkhardt A, Friedman C. Qualitative assessment of the International Classification of Functioning, Disability, and Health with respect to the desiderata for controlled medical vocabularies. *Int J Med Inform.* 2006;75(5):384-95.
9. Cieza A, Stucki G. New approaches to understanding the impact of musculoskeletal conditions. *Best Pract Res Clin Rheumatol.* 2004;18(2):141-54.
10. Levack W. The International Classification of Functioning, Disability and Health (ICF): application to physiotherapy. *NZ J Physiother.* 2004;32(1):1-2.
11. Finger ME, Cieza A, Stoll J, Stucki G, Huber EO. Identification of intervention categories for physical therapy, based on the international classification of functioning, disability and health: a Delphi exercise. *Phys Ther.* 2006;86(9):1203-20.
12. Sampaio RF, Mancini MC, Goncalves GGP, Bittencourt NF, Miranda AD, Fonseca ST. Aplicação da Classificação Internacional de Funcionalidade, Incapacidade e Saúde (CIF) na prática clínica do fisioterapeuta. *Rev Bras Fisioter.* 2005; 9(2):129-36.
13. Stucki G, Ewert T, Cieza A. Value and application of the ICF in rehabilitation medicine. *Disabil Rehabil.* 2002;24(17):932-8.
14. Stucki G. International Classification of Functioning, Disability, and Health (ICF): a promising framework and classification for rehabilitation medicine. *Am J Phys Med Rehabil.* 2005;84(10):733-40.
15. International classification of functioning, disability and health (ICF): crosscutting breakout session. Physical Disabilities through the Lifespan Conference. *Neurorehabil Neural Repair.* 2005;19(1 Suppl):61S-3S.
16. Sampaio RF, Mancini MC, Fonseca S. Produção científica e atuação profissional: aspectos que limitam esta integração na Fisioterapia e na Terapia Ocupacional. *Rev Bras Fisioter.* 2005; 6(3):113-8.
17. Okochi J, Utsunomiya S, Takahashi T. Health measurement using the ICF: test-retest reliability study of ICF codes and qualifiers in geriatric care. *Health Qual Life Outcomes.* 2005;3:46.
18. Stucki G, Cieza A. The International Classification of Functioning, Disability and Health (ICF) Core Sets for rheumatoid arthritis: a way to specify functioning. *Ann Rheum Dis.* 2004;63 Suppl 2:ii40-ii45.
19. Stucki G, Cieza A, Ewert T, Kostanjsek N, Chatterji S, Üstün TB. Application of the International Classification of Functioning, Disability and Health (ICF) in clinical practice. *Disabil Rehabil.* 2002;24(5):281-2.
20. Jerosch-Herold C, Leite JC, Song F. A systematic review of outcomes assessed in randomized controlled trials of surgical interventions for carpal tunnel syndrome using the International Classification of Functioning, Disability and Health (ICF) as a reference tool. *BMC Musculoskelet Disord.* 2006;7:96.
21. Khan F, Pallant JF. Use of the International Classification of Functioning, Disability and Health (ICF) to identify preliminary comprehensive and brief core sets for multiple sclerosis. *Disabil Rehabil.* 2007; 29(3):205-13.
22. Harris JE, MacDermid JC, Roth J. The International Classification of Functioning as an explanatory model of health after distal radius fracture: a cohort study. *Health Qual Life Outcomes.* 2005;3:73.
23. Uhlig T, Lillemo S, Moe RH, Stamm T, Cieza A, Boonen A, et al. Reliability of the ICF Core Set for rheumatoid arthritis. *Ann Rheum Dis.* 2007;66(8):1078-84.
24. Schuntermann MF. The implementation of the International Classification of Functioning, Disability and Health in Germany: experiences and problems. *Int J Rehabil Res.* 2005;28(2):93-102.
25. Schepers VP, Ketelaar M, van de Port IG, Visser-Meily JM, Lindeman E. Comparing contents of functional outcome measures in stroke rehabilitation using the International Classification of Functioning, Disability and Health. *Disabil Rehabil.* 2007;29(3):221-30.
26. Cieza A, Stucki G. Content comparison of health-related quality of life (HRQL) instruments based on the international classification of functioning, disability and health (ICF). *Qual Life Res.* 2005;14(5):1225-37.
27. ICF Core Sets - International Multicentric Validation Study. Use of the case record form for health professionals. Case example Mrs. Baker Patient with rheumatoid arthritis [texto na Internet]. Munich: DIMDI [cited 2007 Apr 30]. Available from: www.icf-research-branch.org/.../Step%206%20Case%20Description%20with%20ICF%20Categories.pdf
28. Taunton JE, Ryan MB, Clement DB, McKenzie DC, Lloyd-Smith DR, Zumbo BD. A retrospective case-control analysis of 2002 running injuries. *Br J Sports Med.* 2002;36(2):95-101.