



Rehabilitation – definition for research purposes

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Abstract

Introduction and Objective. The Rehabilitation Definition for Research Purposes (RDRP), published in 2022 by Cochrane Rehabilitation, addresses discrepancies resulting from the multiplicity and heterogeneity of rehabilitation definitions hitherto used in the contexts of science, health, and social/legal aspects. The RDRP, based on the paradigm of the International Classification of Functioning, Disability, and Health, provides clear-cut criteria for what rehabilitation includes and excludes. The final version of the RDRP achieved broad agreement among global stakeholders.

Materials and Method. The translation methodology satisfied recommendations established by the Physical and Rehabilitation Medicine Section and Board of the European Union of Medical Specialists. The translating group was composed of representatives of all professions constituting the rehabilitation team reflecting the specifics of the practice of rehabilitation, persons with disability, and linguist professionals.

Results. The article presents the Polish version of the RDRP, established through consensus among a broad representation of professions involved in rehabilitation and end users of rehabilitation.

Conclusions. RDRP may aid 1) researchers carrying original research and compiling original reports, by helping them to correctly define rehabilitation interventions; 2) authors of review papers, by providing clear-cut criteria for papers being considered for inclusion as concerned with rehabilitation; 3) those responsible for developing rehabilitation programmes in health care; 4) clinicians, in making decisions related to prevention, diagnosis and treatment.

Key words

rehabilitation, evidence-based medicine, translation, research, definition

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INTRODUCTION

Cochrane (www.cochrane.org) is a United Kingdom-based non-profit organisation formed with the aim of obtaining high-quality scientific evidence to support decision-making on health and health care. Cochrane Rehabilitation (CR), a global partnership network, was established in 2016 to serve as a bridge between Cochrane and the community of rehabilitation professionals, clinicians, specialists in physical medicine and rehabilitation (PRM), researchers, health care decision makers, end users and other stakeholders. The goals of CR include action to identify and improve methods for producing syntheses of research evidence to enable decision-making on satisfying the needs of individuals with disabilities, and daily clinical practice of rehabilitation on the basis of reliable scientific evidence [1]. Since its foundation, CR has faced problems identifying the scope of the concept of rehabilitation. The multiplicity and heterogeneity of definitions of rehabilitation used in the context of science, health, and social or legal aspects and education has been noted by Levack et al. [2], Meyer et al. [3], and Arienti et al. [4]. Their research brought to light the need to develop a comprehensive and shared definition of rehabilitation for research purposes that would specify what rehabilitation includes, and what it excludes. After nearly three years of work, four preliminary research projects [3–5] and four Delphi rounds of expert discussions, a new definition of rehabilitation for research purposes was published in June 2022. The details of the procedure and working versions of the definition can be found in Negrini et al. [6].

The objective behind the use of the Delphi method during the development of the definition of rehabilitation of research purposes was to ensure agreement among the participants and refine the wording and meaning of definition elements. The work involved 80 members of expert panels from five continents representing eight countries (Finland, France, Germany, Italy, New Zealand, Switzerland, Turkey and the United Kingdom) and, collectively, middle and low income countries, global and regional organisations (Asia-Oceania Society of Physical and Rehabilitation Medicine, Cochrane, CR, European Academy of Rehabilitation Medicine, European Society of Physical and Rehabilitation Medicine, International Society of Physical and Rehabilitation Medicine, International Society for Prosthetics and Orthotics, Physical and Rehabilitation Medicine Section, and Board of the European Union of Medical Specialists – PRM S&B UEMS, REH-COVER – REHAbilitation COVID-19 Evidence-based Response, World Federation for NeuroRehabilitation, World Federation of Occupational Therapists), scientific journals involved with rehabilitation: American Journal of Physical Medicine and Rehabilitation, Annals of Physical and Rehabilitation Medicine, Archives of Physical Medicine and Rehabilitation, Clinical Rehabilitation, Developmental Neurorehabilitation, Journal of Occupational Rehabilitation, Journal of Orthopaedic & Sports Physical Therapy, Journal of Rehabilitation Medicine, Musculoskeletal Science & Practice, Neurorehabilitation and Neural Repair, and the Physical Therapy and Rehabilitation Journal.

The invited experts comprised both professionals specialising in rehabilitation and related fields (specialists in PRM, infectious diseases, rheumatology, chiropractors, physiotherapists, speech therapists, psychologists and social scientists) and rehabilitation end users. The four

Consensus Meetings relied on the Delphi method to enable the participants to exchange views and comments, resulting in multiple modifications of preliminary and intermediate versions of the definition. The items included in the final version of the definition of rehabilitation were approved by 88.9% – 100% of the participants. The structure of the rehabilitation definition for research purposes is compatible with the PICO model (population, intervention, control/comparative intervention, outcome) [6].

During a workshop of the UEMS PRM S&B Professional Practice Committee in Bucharest in September 2022, it was decided that the rehabilitation definition for research purposes should be translated into national languages. A methodology of translation was discussed and approved. The proposal was then adopted by the UEMS PRM S&B General Assembly. A call to action for all UEMS member states was approved during the UEMS PRM S&B General Assembly in Zagreb in March 2023.

The aim of this study is to develop a Polish version of the definition of rehabilitation for research purposes.

MATERIAL AND METHODS

The idea of translating the definition of rehabilitation for research purposes was presented at meetings of the Main Board of the Polish Rehabilitation Society (MBPRS) on 16 June and 27 September 2023 and gained the academic patronage of the MBPRS. The methodology was in keeping with that recommended by the UEMS PRM Section Professional Practice Committee (PPC). In line with these guidelines, translation should be performed by a multi-speciality group led by a PRM specialist. The group should include representatives of all professions constituting the rehabilitation team to reflect the specifics of the practice of rehabilitation in a given country (e.g., a physiotherapist, occupational therapist, speech therapist, psychologist, nurse, orthotics/prosthetics expert, social worker, and biomedical engineer). The team should also include a representative of the rehabilitation end users (e.g., a person with disability). Work on translation is divided into four stages:

1. translation into the national language by at least two group members, including a specialist in PRM, utilising the national nomenclature of the International Classification of Functioning, Disability and Health (ICF) [7];
2. consensus on the translated text to be agreed by the entire group;
3. back translation by two other group members;
4. final corrections and approval of the final version by the entire group.

The expert group was set up in collaboration with ZGPTReh and the final composition of the group approved by the MBPRS Presidium. The group of experts represented all specialities found in rehabilitation teams recommended by the UEMS PRM Section PPC [8], end users and linguists (Tab. 1). The National Consultant on PRM (M.L.) was also a member of the group.

Eventually, the final version of the definition was presented to members of the UEMS PRM Section PPC, who submitted their remarks. An additional voting round was performed to review the suggestions.

Table 1. Composition of the team. Initials refer to the authors of the article

Participant	K.B.	D.F.	M.G.	B.H.	D.J.	M.K.	A.K.	M.Ł.	M.M.	S.P.	P.P.	N.S.	B.T.	P.T.	K.W.	O.W.
PRM Specialist					x			x					x	x		x
Nurse	x															
Physiotherapist							x		x			x				
Occupational therapist							x									
Speech therapist						x										
Psychologist																x
Social worker											x					
Orthopaedic technician									x							
Biomedical engineering specialist										x						
Dietician				x												
Educationalist											x					
Linguist			x	x		x										
End user		x									x					
Role in team*																
*co-ordinator														x		
*secretary							x									x
*translation into Polish			x	x	x											
*back translation															x	x

RESULTS

The work performed between 16 August – 24 November 2023 (see Tab. 2 for timeline) led to the adoption of the following wording of the rehabilitation definition for research purposes in Polish:

Rehabilitacja „w kontekście opieki zdrowotnej (patrz uwagi) jest definiowana jako multimodalny, skoncentrowany na konkretnej osobie, oparty na współpracy proces (ogólna definicja interwencji) składający się z interwencji zorientowanych na „zdolności danej osoby (poprzez wpływ na strukturę ciała, funkcje i aktywności/uczestnictwo) i/ lub czynniki kontekstowe powiązane z wykonaniem (szczegółowa definicja interwencji), którego celem jest osiągnięcie optymalnego poziomu funkcjonowania (wynik) osób w określonym stanie zdrowia obecnie doświadczających lub mogących doświadczyć niepełnosprawności, lub osób z niepełnosprawnością” (populacja).

UWAGI:

1. Obecna definicja rehabilitacji skupia się na świadczeniach medycznych zaspokajających potrzeby opieki zdrowotnej poszczególnych osób. „Opieka zdrowotna” może być zdefiniowana jako „...ogólny termin obejmujący świadczenia zdrowotne, których celem jest poprawa zdrowia w populacji ogólnej, a także wyleczenie chorób oraz łagodzenie objawów chorobowych. Opieka zdrowotna może odnosić się do świadczenia usług zdrowotnych (np. prywatna lub publiczna opieka zdrowotna), placówek (np. szpital lub ośrodek zdrowia), a także świadczenia samej opieki (np. zapewnienie opieki zdrowotnej bądź uzyskanie opieki zdrowotnej)” (Allebeck 2020). Obecna definicja rehabilitacji nie odnosi się do reintegracji społecznej osób skazanych.
2. Definicja wykorzystuje model PICO w następującym porządku: interwencja, wyniki, populacja.
3. Zgodnie z definicją, aby można było mówić o rehabilitacji, muszą być uwzględnione wszystkie elementy definicji.

Table 2. Stages of translation of rehabilitation definition. Initials refer to the authors of the article

Stage	Responsible persons	Timeframe
Translation into Polish (initial version)	M.G., B.H., D.J.	16 Aug - 12 Sep 2023
Analysis of initial version	Entire team	12 Sep - 21 Sep 2023
1st consensus meeting (second translation)	Entire team	22 Sep - 24 Sep 2023
Back translation	K.W., O.W.	25 Sep - 21 Oct 2023
Analysis of back translation	Entire team	22 Oct - 01 Nov 2023
2nd consensus meeting (3rd translation)	Entire team	02 Nov 2023
Analysis of 3rd translation and back translation	Entire team	03 Nov - 19 Nov 2023
Final version approval (4th translation)	Entire team	20 Nov - 24 Nov 2023
Presentation of the final version in UEMS PRM S&B PPC, receiving comments	P.T., J.K., PPC members	22 Feb - 26 Apr 2024
Additional discussion, voting and validation	Entire team	02 Apr - 13 May 2024

4. Wyrażenie „interwencja rehabilitacyjna” jest powszechnie stosowane jako określenie pojedynczej interwencji. Uproszczenie to może jednak być źródłem nieporozumień. Według obecnej definicji rehabilitacji wyrażenie „interwencja rehabilitacyjna” jest dopuszczalne jako skrót określenia „pojedyncza interwencja w procesie rehabilitacji”. Wynika z tego, że nie jest dopuszczalne jego użycie w znaczeniu „interwencja świadczona przez profesjonalistę rehabilitacji (członka zespołu rehabilitacyjnego).” Zgodnie z obecną definicją wyrażenie „interwencje rehabilitacyjne” nie obejmuje pojedynczych interwencji realizowanych

poza ramami procesu rehabilitacji przez profesjonalistów rehabilitacji.

The definition, together with the positions of each element in the PICO model, is presented in Table 3. Table 4 contains the approved version of the back translation. Draft versions of the Polish translation of the Definition (dated on September 12, 2023 and September 24, 2023) are available from the Corresponding Author upon request. The outcomes of the translation work indicated the need to introduce minor modifications to the source text in order for it to

Table 3. Rehabilitation definition for research purposes with meanings of individual elements

Model PICO	Definicja	Co to oznacza?
W kontekście opieki zdrowotnej (p. uwaga 1)		
INTERWENCJA	rehabilitacja to	
	multimodalny	Stosowanie więcej niż jednej interwencji lub jednej interwencji składającej się z więcej niż jednej składowej.
	skoncentrowany na konkretnej osobie	Interwencje dobiera się i dopasowuje do potrzeb i stopnia zaangażowania osoby rehabilitowanej, zwiększając i wzmacniając jej zasoby, biorąc pod uwagę wyznawane przez nią wartości, preferencje i czynniki kontekstowe.
	oparty na współpracy	Uczestnictwo osoby/osób przeprowadzających interwencję i osoby rehabilitowanej/osób rehabilitowanych. Stopień zaangażowania osób uczestniczących jest determinowany stanem zdrowia, etapem rehabilitacji (ostry, po ostrym okresie choroby, przewlekły) i czynnikami kontekstowymi, takimi jak miejsce prowadzenia rehabilitacji (szpitalna, ambulatoryjna, domowa, środowiskowa). Uczestnictwo osoby w procesie rehabilitacji może być na początkowym etapie bierne, lecz musi się stopniowo zwiększać w miarę postępu procesu rehabilitacji.
	proces	Proces obejmuje jeden lub więcej kolejnych cykli rehabilitacji (składających się z oceny początkowej, w tym wyznaczenia celów rehabilitacji, przypisania interwencji, realizacji interwencji, ewaluacji i, w razie potrzeby, powtórzenia) prowadzonych, aż do osiągnięcia optymalnego poziomu funkcjonowania - powszechnie nazywany cyklem rehabilitacji (Rehab-cycle*) [9].
	składający się z interwencji zorientowanych na zdolności danej osoby	Tego, co dana osoba potrafi wykonać przy ograniczonym wpływie lub braku wpływu czynników środowiskowych.
	(poprzez wpływ na strukturę ciała, funkcje i aktywności/uczestnictwo)	Pojęcie zdolności odnosi się do struktury ciała (części ciała i narządów), funkcji ciała (fizjologicznych, z uwzględnieniem psychologicznych, funkcji układów ciała), aktywności (zdolności danej osoby do wykonania zadania lub podjęcia działania), uczestnictwa (zdolności do angażowania się w sytuacje życiowe).
	i/lub	
czynniki kontekstowe powiązane z wykonaniem.	Czynniki kontekstowe obejmują czynniki osobowe (wpływające na doświadczanie niepełnosprawności przez daną osobę) i środowiskowe (środowisko fizyczne, społeczne i system postaw, w którym ludzie żyją), które wpływają na wykonanie (tzn. na to, co osoba z określonym problemem zdrowotnym wykonuje w swoim typowym środowisku).	
WYNIK	Celem jest	
	osiągnięcie optymalnego poziomu	Poprawa, utrzymanie lub ograniczenie utraty (zmiana trajektorii w odniesieniu do spowolnienia i/lub czasu trwania) w porównaniu z przewidywanym (naturalnym) przebiegiem.
	funkcjonowania	Funkcjonowanie należy rozumieć jako ogólne określenie obejmujące strukturę i funkcje ciała, aktywności i uczestnictwo.
POPULACJA	osób w określonym stanie zdrowia	Stan zdrowia obejmuje choroby, uszkodzenia ciała oraz zmiany fizjologiczne (związane na przykład ze starzeniem się lub ciążą) które wpływają negatywnie na zdrowie i funkcjonowanie.
	obecnie doświadczających niepełnosprawności	Osoby z upośledzeniem(ami) struktur i funkcji ciała, ograniczeniem(ami) aktywności lub uczestnictwa, gdy istnieje możliwość wyzdrowienia lub poprawy funkcjonowania.
	lub	
	mogących doświadcząć niepełnosprawności	Istnieje prawdopodobieństwo powstania niepełnosprawności z powodu pogorszenia się stanu zdrowia lub czynników kontekstowych, gdy istnieje możliwość zapobieżenia temu lub ograniczenia.
	lub	
osób z niepełnosprawnością.	Określenie „osoby z niepełnosprawnością” obejmuje osoby, u których występuje długotrwałe upośledzenie natury fizycznej, umysłowej, intelektualnej lub w zakresie zmysłów, co w oddziaływaniu z różnymi barierami może utrudniać im pełne i skuteczne uczestnictwo w życiu społecznym, na zasadzie równości z innymi osobami (Konwencja Narodów Zjednoczonych o prawach osób z niepełnosprawnością - UNCRPD), gdy istnieje możliwość uniknięcia lub ograniczenia pogorszenia lub osiągnięcia optymalnego poziomu funkcjonowania.	

Uwagi:

1. Przedstawiana w tym opracowaniu definicja koncentruje się na świadczeniach zdrowotnych skierowanych na potrzeby z zakresu opieki zdrowotnej danej osoby. Opieka zdrowotna obejmuje świadczenia związane z potrzebami zdrowotnymi. „Ogólne potrzeby zdrowotne dotyczą promocji zdrowia, profilaktyki, leczenia chorób ostrych i przewlekłych oraz, w razie potrzeby, kierowania do wyspecjalizowanych placówek. Wszystkie te potrzeby powinna zaspokajać podstawowa opieka zdrowotna, jak również, w odpowiednich przypadkach, opieka drugiego i trzeciego stopnia referencyjności (WHO). Usługi zdrowotne są świadczone przez profesjonalistów rehabilitacji (członków zespołu rehabilitacyjnego), innych pracowników ochrony zdrowia lub odpowiednio przeszkolonych pracowników środowiskowych. Definicja ta nie obejmuje reintegracji społecznej osoby skazanej.

2. Definicja wykorzystuje model PICO w następującym porządku: Interwencja, Wynik, Populacja.

3. Zgodnie z tą definicją, aby można było mówić o rehabilitacji, muszą być uwzględnione wszystkie elementy definicji.

4. Wyrażenie „interwencja rehabilitacyjna” jest powszechnie stosowane jako określenie pojedynczych interwencji. Takie uproszczenie może jednak być źródłem nieporozumień. Według nowej definicji rehabilitacji wyrażenie „interwencja rehabilitacyjna” jest dopuszczalne jako skrót określenia „pojedyncza interwencja w procesie rehabilitacji”. Wynika z tego, że nie jest dopuszczalne jego użycie w znaczeniu „interwencja świadczona przez profesjonalistę rehabilitacji”. Zgodnie z obecną definicją wyrażenie „interwencje rehabilitacyjne” nie obejmuje pojedynczych interwencji realizowanych poza ramami procesu rehabilitacji przez profesjonalistów rehabilitacji.

Table 4. Approved back translation

Model PICO	Definition	What does this mean?
		In a health care context (see comment 1)
INTERVENTION	Rehabilitation is	
	a multimodal	Use of more than one intervention or one intervention with more than one component.
	person-centred	Interventions are selected and adapted to the needs and level of involvement of the rehabilitated person, increasing and strengthening their capabilities, taking into account their values, preferences and contextual factors.
	cooperation- based	Participation of the person(s) conducting the intervention and the rehabilitated person(s). Level of involvement of the persons participating is determined by health state, phase of rehabilitation, (acute, after acute phase, chronic phase), and contextual factors, such as the place of rehabilitation (hospital, outpatient, home, local community centres). A person's participation in the rehabilitation process may be passive at the initial stage, but must gradually increase as the rehabilitation process progresses.
	process	The process involves one or more consecutive rehabilitation cycles (consisting of an initial assessment, including setting rehabilitation goals, assigning intervention, evaluating and, if necessary, repeating) conducted until an optimal level of functioning is achieved - commonly referred to as a rehabilitation cycle (Rehab-cycle®) [9].
	including the intervention targeting person ability	What a person can do with limited or no influence from environmental factors.
	(through the targeting on the body structures, functions and activities / participation)	The concept of capacity refers to body structures (body parts and organs), body functions (physiological, including psychological, functions of body systems), activity (a person's capacity to perform a task or take an action), participation (capacity to engage in life situations).
	and/or	
contextual factors related to performance.	Contextual factors include personal factors (that influence a person's experience of disability) and environmental factors (physical, social, and attitudinal environment in which people live) that influence performance (i.e., what a person with a specific health problem does in a typical environment).	
OUTCOME	The goal is	
	to reach the optimal level of	Improvement, maintenance or reduction of loss (change in trajectory with respect to deceleration and/or duration), compared to the expected (natural) course.
	functioning	Functioning should be understood as a general term encompassing body structures and functions, activities and participation.
POPULATION	people with specific health condition	Health condition includes diseases, injuries, and physiological changes (for example, related to aging or pregnancy) that negatively impact health and functioning.
	currently experiencing disability	People with impairment(s) of body structures and functions, limitation(s) of activity or participation, when there is a possibility of recovery or improvement of functioning.
	or	
	likely to experience disability	Disability is likely to arise due to deterioration of health or contextual factors when it can be prevented or reduced.
	or	
people with disability.	The term 'persons with disabilities' includes persons who have long-term physical, mental, intellectual or sensory impairments which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others (Convention United Nations on the Rights of Person with Disabilities - UNCRPD) when it is possible to avoid or limit deterioration or achieve an optimal level of functioning.	

Comments

1. The current definition focuses on health services that address an individual's health care needs. Health care includes services related to health needs. Common health needs concern health promotion, prevention, treatment of acute and chronic diseases and, if necessary, referral to specialised centres. All these needs should be met by primary health care as well as, where appropriate, secondary and tertiary care (WHO). Health services are provided by rehabilitation professionals (members of the rehabilitation team), other health care professionals or appropriately trained community workers. The current definition of rehabilitation does not refer to the social reintegration of convicted persons.
2. The definition uses the PICO model in the following order: Intervention, Outcome, Population.
3. According to the definition, in order to talk about rehabilitation, all elements of the definition must be included.
4. The term 'rehabilitation intervention' is often used to describe a single intervention. However this simplification may be a source of confusion. According to the current definition of rehabilitation, the expression 'rehabilitation intervention' is acceptable as an abbreviation of the term 'single Intervention in the rehabilitation process'. It follows that it is not permissible to use it in the sense of 'intervention provided by a rehabilitation professional (member of a rehabilitation team)'. As currently defined, the phrase 'rehabilitation interventions' does not include individual interventions provided outside the rehabilitation process by rehabilitation professionals.

more appropriately reflect the meaning of a rehabilitation intervention and improve the intelligibility of the definition.

The following suggestions were made:

- 1) replace the phrase 'commonly used' with 'frequently used' in Comment 4; in the sentence: The expression 'rehabilitation intervention; is commonly used to describe a single intervention [6];
- 2) add a reference to a source describing the Rehab-cycle® rehabilitation cycle in the explanatory note for the *process* element [9].

DISCUSSION

The definition of rehabilitation for research purposes presented in this article reflects the consensus position of representatives of all professions involved in performing rehabilitation. The reliability of the consensus position is ensured by the composition of the group tasked with forming the definition and the group of translators, as well as by adherence to the methodology of translation adopted by the UEMS PRM S&B.

The definition contains clear-cut criteria for determining what rehabilitation includes and what it excludes. An intervention that is rehabilitation must respect every element

of the definition. By narrowing the scope of rehabilitation, certain interventions hitherto often regarded as rehabilitation will no longer be included [10–14] (e.g., those complying with one element, i.e., not multimodal, e.g. prescribing a medication, recommending an orthosis, or performing a manual therapy procedure, even though they are performed by PRM specialists and aim to ensure improvement in a particular component of functioning).

On the other hand, certain interventions are included in the scope of rehabilitation if they are part of a process of rehabilitation (e.g., the administration of botulinum toxin as part of therapy of the hand in a spastic patient, or surgical tendon lengthening as an element of treatment to improve mobility in a cerebral palsy sufferer). Interestingly, the postulate of multimodality of rehabilitation, which reached an agreement rate of 88.9% among the authors of the new definition of rehabilitation [6], has been present in the concept of the Polish School of Rehabilitation since as early as the 1960s [15].

The publication and dissemination of the new definition of rehabilitation improves the likelihood of a more appropriate perception of rehabilitation. In particular, this applies to the position of the PRM specialist in the health care system. This is of significant importance in Poland, where there is little awareness of rehabilitation as a medical speciality, and of ways to address the needs of persons with disabilities [16, 17]. The new definition underlines a key role of the rehabilitation team in performing rehabilitation interventions. In practice, rehabilitation standards in Poland should include interventions performed by a social worker, occupational therapist or dietician, and orthopaedic technicians and biomechanical technicians, should be among the members of a rehabilitation team [18]. The current situation and the widespread practice of not involving social workers in rehabilitation in the hospital setting (on the grounds that they do not perform medical procedures) severely disrupts the process of rehabilitation, often not only precluding a safe discharge of the patient from hospital, but also impeding the initiation of subsequent stages of rehabilitation in the community [19].

Under the new definition, rehabilitation comprises only those interventions aiming to improve functioning or prevent deterioration of functioning with regard to the performance of specific components of the activity and participation domain. Thus, rehabilitation does not include actions whose isolated objective is to improve the functioning of a part of the body (e.g., reduction of perceived pain, improvement of the range of motion or muscle strength, unless this leads to improved activity (e.g., with regard to activities of daily living), or participation (involvement in particular living situations). The new definition of rehabilitation also excludes actions to address contextual factors unless they relate directly to the patient's activity or participation. Accordingly, rehabilitation does not include a policy action to reduce architectural barriers, even if rehabilitation professionals are involved; while the adaptation of a particular patient's home before discharge from hospital does constitute part of the process of rehabilitation [6].

The new rehabilitation definition for research purposes does not include the politically important aspect of viewing rehabilitation as a health strategy [20], as this approach goes beyond the operationalization aspect, which is significant from a research perspective [6, 12].

A better understanding of the essence of the rehabilitation intervention may influence both rehabilitation practice and the implementation of future research projects. Negrini et al. use the example of two possible scenarios of designing research projects to study the utility of spine manipulation for rehabilitation purposes. In one scenario, the study protocol might limit the intervention to spinal manipulation procedures. In the other scenario, the treatment providers might take heed of the new definition of rehabilitation and consider it important to broaden the intervention by including educational activities or advice on exercises, not only because the outcomes would be extended to areas of functioning other than bodily functions, but also because this would be an opportunity to see the outcomes of their chosen approach in practice. Similarly, in the second scenario, the health care provider may choose a rehabilitation intervention (a combination of manipulation, education and exercise advice) over a mono-modal physiotherapeutic intervention, and might further supplement it with cognitive-behavioural therapy [6].

The new definition of rehabilitation for research purposes places the responsibility on the authors of secondary (synthetic) studies: in working on systematic reviews, they need to consider whether the interventions described in the papers under analysis actually meet the criteria of rehabilitation in terms of content and objectives. A properly designed methodology of systematic reviews based on the new definition of rehabilitation will help avoid common interpretation errors consisting in unjustifiably treating single interventions or interventions addressing selected bodily functions (often representing pre-clinical research or reporting on effects noted in healthy volunteers) as playing a role in the rehabilitation of persons with disability or likely to experience disability [6].

The authors acknowledge that this definition is a first version and may require further refinements and updates as knowledge becomes more advanced and the definition is tested in practice [6].

CONCLUSIONS

The definition of rehabilitation presented in this article may aid: 1) researchers carrying original research and compiling original reports – by helping them to correctly define rehabilitation interventions; 2) authors of review papers – by providing clear-cut criteria for papers being considered for inclusion as concerned with rehabilitation; 3) those responsible for developing rehabilitation programmes in health care; 4) clinicians, in making decisions related to prevention, diagnosis and treatment.

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