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The 3rd Cochrane Rehabilitation Methodology Meeting: “Rehabilitation definition for scientific research purposes”

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Cochrane Rehabilitation was founded in December 2016. During 3 years of intensive work (1-3), Cochrane Rehabilitation consistently identified that there is a need to better define what rehabilitation is and what it is not. In particular, this realisation emerged following experiences in 4 key occasions: while tagging all the Cochrane Systematic Reviews (CSR) in preparation of a database of rehabilitation-relevant CSRs (4); in observing that some CSRs contain the word rehabilitation in the title although the interventions provided did not appear rehabilitative (5); in deciding on the interventions to include in World Health Organization's Package of Rehabilitation Interventions based on Clinical Practice Guidelines and CSRs (6); and in developing the Randomised Controlled Trials Rehabilitation Checklist (RCTRACK) reporting guideline (7). During each of these activities, currently available definitions of rehabilitation failed to clearly define what was needed for scientific and research purposes, specifically to identify inclusion (what rehabilitation is) and exclusion (what rehabilitation is not) criteria. As a result, Cochrane Rehabilitation launched the “Rehabilitation definition for research purposes” project, with the aim of reaching consensus on a definition which would support high-quality reproducible research activities in this field.

The methodology of the project was developed during a series of iterative discussions held by the Cochrane Rehabilitation Executive and Methodology Committees. Moreover, the Advisory Board of Cochrane Rehabilitation, comprising relevant rehabilitation stakeholders (38 members from five continents, representing 11 world/continental organizations, 11 scientific journals, 4 Cochrane Networks and 3 Cochrane Groups, with invited experts and Low Middle Income Countries (LMICs) and consumer representatives) (8), was consulted during its meeting in Kobe in June 2019. The methodology was then further refined by the project's promoters (SN, TM, GS) based on the received feedback.

The project kicked off with a consensus meeting held during the 3rd Cochrane Rehabilitation Methodology Meeting in February 2020 in Milan (Italy). This meeting was one of several initiatives led by Cochrane Rehabilitation to strengthen evidence-based scientific production in our field (9-11).

The methods of the project encompasses the following action items:

1. A survey of the Cochrane Rehabilitation Advisory Board and Executive Committee, and of the Milan consensus meeting participants, aimed at collecting the current definitions acknowledged by rehabilitation organizations and journals, experts and consumers/LMICs representatives;
2. The aforementioned consensus meeting held in Milan (Italy), attended by rehabilitation experts identified through consensus among the promoters and Cochrane Rehabilitation Executive Committee;
3. Meetings and online consultations between a core group of developers (authors of this paper) identified during the consensus meeting;
4. Presentations on the preliminary definitions during the Cochrane Rehabilitation sessions of two international meetings, aimed at generating feedback and input from general audiences: the International Society of Physical and Rehabilitation Medicine (ISPRM) in Orlando (Florida, USA) in March 2020, and the European Society of Physical and Rehabilitation Medicine (ESPRM) in Belgrade (Serbia), planned for May 2020 but postponed until September due to the COVID-19 pandemic;
5. A two-stage Delphi procedure for comments and agreement, first involving the participants of the consensus meeting, and then the Advisory Board and the Executive Committee of Cochrane Rehabilitation.

The consensus meeting was organised in two parts, and its main results are presented in the papers of this Special Section of the European Journal of Physical and Rehabilitation Medicine. Part one introduced the current backdrop of how rehabilitation is understood and the implications of this understanding for rehabilitation research, and laid the foundation for discussion and consensus-oriented decision-making on a new definition of rehabilitation in part two. Part two, the “Pars construens” (constructive part) of the meeting, took place in working groups that required each working group to prepare and present a proposal for the new rehabilitation definition for research purposes. A final discussion on the proposals with voting on individual elements of the definition resulted in a shared provisional definition of rehabilitation for scientific and research purposes, to be further analysed by the core group before undergoing a Delphi process.

During the consensus meeting, the participants reached agreement that the base definition should contain the key words that would later be populated with the inclusion and exclusion criteria for research purposes.

The goal was that each concept within the definition must provide at least one inclusion/exclusion criterion. To aid the identification of key concepts relating to these inclusion/exclusion criteria, a modified version of the PICO (Population, Intervention, Comparison, Outcome) model was followed. The modification was the exclusion of the C (Comparison) which was not necessary for the purpose of our definition. During the rounds of discussion, a key point raised repeatedly was that the use of the term rehabilitation when describing the process of rehabilitation, potentially differed from the use of the term when describing a “rehabilitation intervention”. It was agreed that subsequent work was required to reach consensus on a related definition of a “rehabilitation intervention”.

The first provisional definition developed during the consensus meeting according to the PICO model is the following:

Rehabilitation is a *“multimodal person-centred process including functioning interventions targeting (1) body functions, and/or (2) activities and participation, and/or (3) the interaction with the environment”* **(Intervention)** aimed at *“optimising functioning”* **(Outcome)** in *(1) persons with health conditions (a) experiencing disability or (b) likely to experience disability, and/or (2) persons with disability”* **(Population)**.

This provisional definition is now under further development as part of action items 3 to 5 outlined above.

The final definition will then need to be validated. We are currently planning a subsequent validation phase that will involve checking whether the newly developed definition addresses the aforementioned issues found in rehabilitation research.

The final definition will constitute the basis for the RCTRACK project and inform all future work of Cochrane Rehabilitation. Furthermore, it is expected to benefit the scientific rehabilitation community, as a tool for enhancing the robustness of methodologies used and for strengthening the confidence in the output of rehabilitation research.

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