

## External validity of definition of rehabilitation in health

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### Abstract

**Background.** A definition of rehabilitation in health (medical rehabilitation) (RIH-MR) must be valid both for those in and out of the field. In scientific papers, internal validity refers to the possibility of a study to explain its findings without biases, external validity to generalizability of results to other contexts.

Here we consider the first the possibility to describe with the definition all what we do in RIH-MR, and the latter the possibility to rule out anything that is not RIH-MR.

In Cochrane Rehabilitation (CR) we first faced the problem when a Cochrane Systematic Review (CSR) on Penile Rehabilitation was published. The review dealt only with drugs; we considered inappropriate the use of the term rehabilitation but lacked a definition of RIH-MR to confirm our thesis.

**Objective.** the aim was to quantify the phenomenon looking at all the CSRs claiming to study rehabilitation and comparing to the definitions provided by CR, PubMed (Mesh Term) and the author judgment.

**Methods:** We performed a search of the all CSRs published in the Cochrane Database of Systematic Reviews with the presence of the term "rehabilitation" in the title. Exclusion criteria were: editorial, updated CSRs, withdrawn CSRs. A content analysis of the CSRs included/excluded by each classification was performed. For each field/intervention, the author judged the classifications of CR and PM coherent if all CSRs were included or excluded, incoherent if some CSRs were included and other excluded.

**Results:** Out of 14,816 records, we found 139 papers with the term rehabilitation in the title. We analyzed 89 CSRs and CR included 94.4% of CSRs, the author 91%, PubMed only 50.5%. 4 reviews and Cancer and vestibular rehabilitation fields were judged non-RIH-MR by all classifications. CR incoherently excluded one review related to exercises cardiac rehabilitation. The author excluded 4 reviews included by CR as the provided interventions were not considered rehabilitation. All the other CSRs were judged consistently by CR and the author. Only the neurological field was coherently included by PM, albeit excluded in all cases with application of cognitive and neuropsychological interventions. We did not find coherence for all the other fields and interventions.

**Conclusion.** The results highlight the possibility to exclude "single interventions" from the definition, even if they are classically considered in the field of rehabilitation. Consequently, we could provide a definition

of “rehabilitation intervention”, and this could be considered in terms of the professionals providing the intervention.

**Patient or healthcare consumer involvement.** Not applicable.