

A systematic review of Clinical Practice Guidelines for persons with amputation.
A “Best Evidence for Rehabilitation” (be4rehab) paper to develop the WHO's Package of Interventions for Rehabilitation

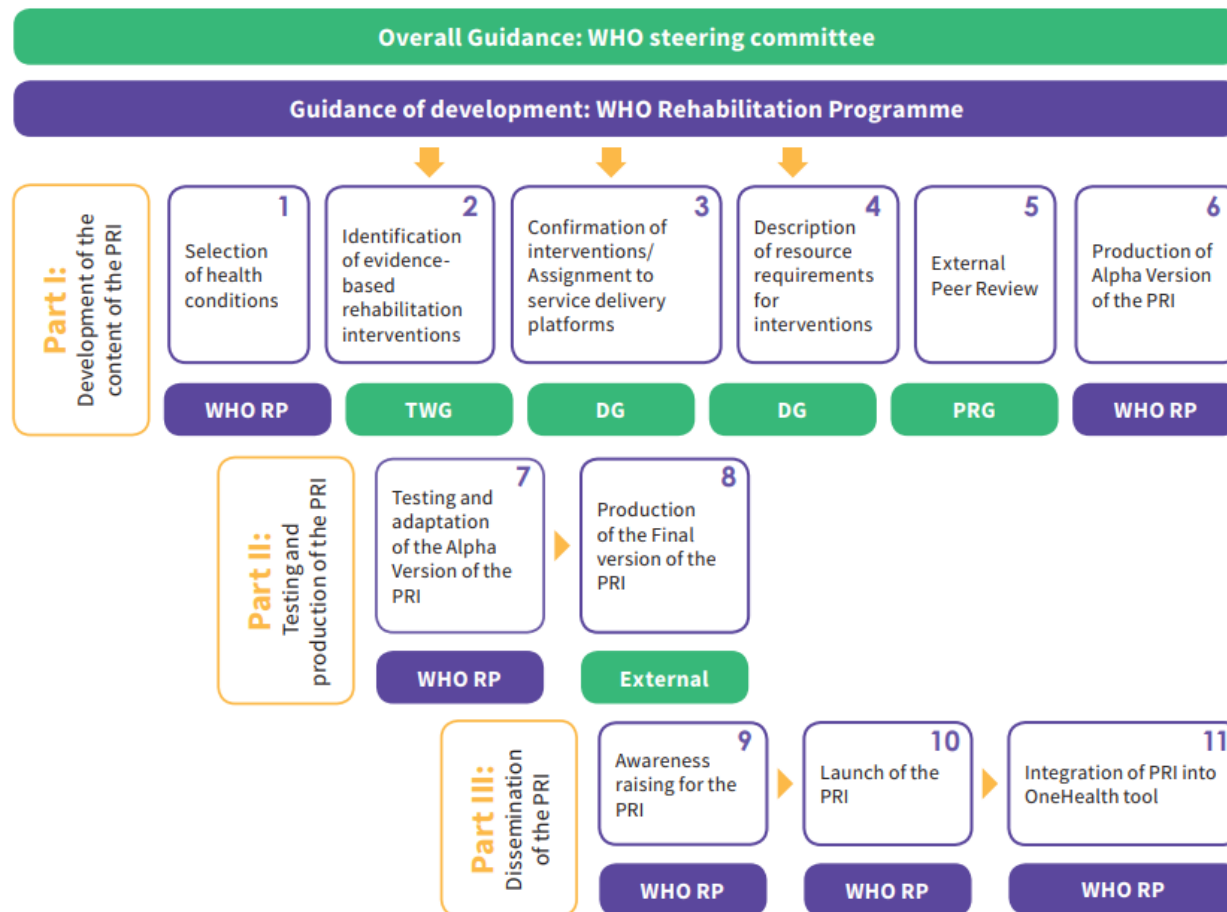
DR. A. HEYNS

UNIVERSITY HOSPITALS LEUVEN, DEPARTMENT PHYSICAL MEDICINE AND REHABILITATION

IN COOPERATION WITH

- SOFIE JACOBS
- STEFANO NEGRINI
- MICHELE PATRINI
- ALEXANDRA RAUCHE
- AN DE GROEF
- CARLOTTE KIEKENS

Why did we do this ?



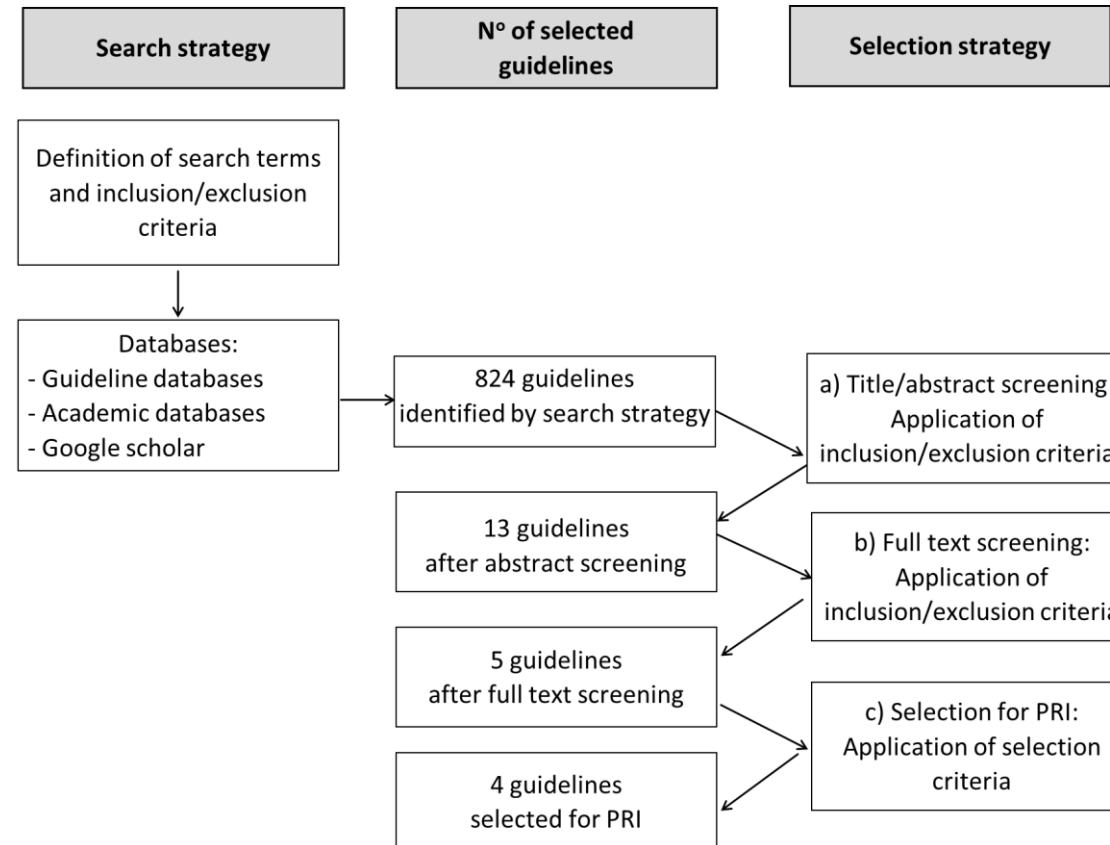
Step 2 of the WHO's Package of Interventions for Rehabilitation (PIR)

The PIR will be WHO resource containing evidence-based rehabilitation interventions that will facilitate the integration of rehabilitation interventions in all service delivery platforms.

What did we do ?

- Systematic review of existing CPG's on amputation published between 2008 to 2018.
- Independent evaluation of the CPGs quality with the “Appraisal of Guidelines for Research and Evaluation” (AGREE II)
- Report the results of the systematic search performed.
- Present the topics of the recommendations and the current state of evidence from the Clinical Practice Guidelines (CPG's) relevant to rehabilitation of amputees.

What where the results ?



What were the results ?

Guideline	Body of evidence			Strength of recommendation			
	RCTs, SR or MA	Clinical studies	Expert opinion	Strong	Intermediate	Weak	Not applicable
Richtlijn amputatie en prothesiologie onderste extremiteit, Geertzen et al.	2 (3.4%)	7 (11.9%)	50 (84.7%)	0 (0.0%)	9 (15.3%)	50 (84.7%)	0 (0.0%)
Clinical guidelines for the pre and post-operative physiotherapy management of adults with lower limb amputations, 2nd edition	2 (1.8%)	34 (30.1%)	77 (68.1%)	1 (0.9%)	110 (97.3%)	2 (1.8%)	0 (0.0%)
Va/DoD clinical practice guideline for rehabilitation of individuals with lower limb amputation (Version 2.0)	9 (50.0%)	3 (16.7%)	6 (33.3%)	4 (22.2%)	Not applicable	13 (72.2%)	1 (5.6%)
Va/DoD clinical practice guideline for the management of upper extremity amputation rehabilitation	2 (7.4%)	0 (0.0%)	25 (92.6%)	0 (0.0%)	2 (7.4%)	25 (92.6%)	0 (0.0%)

What where the results ?

Highest evidence

- ✓ Pain treatment.
- ✓ The importance of exercise therapy.
- ✓ Education patients and their carers on numerous subjects.
- ✓ Use of rigid dressing in transtibial amputations.
- ✓ To assess the medical history and preoperative limitations of the patients with respect to their potential outcome.

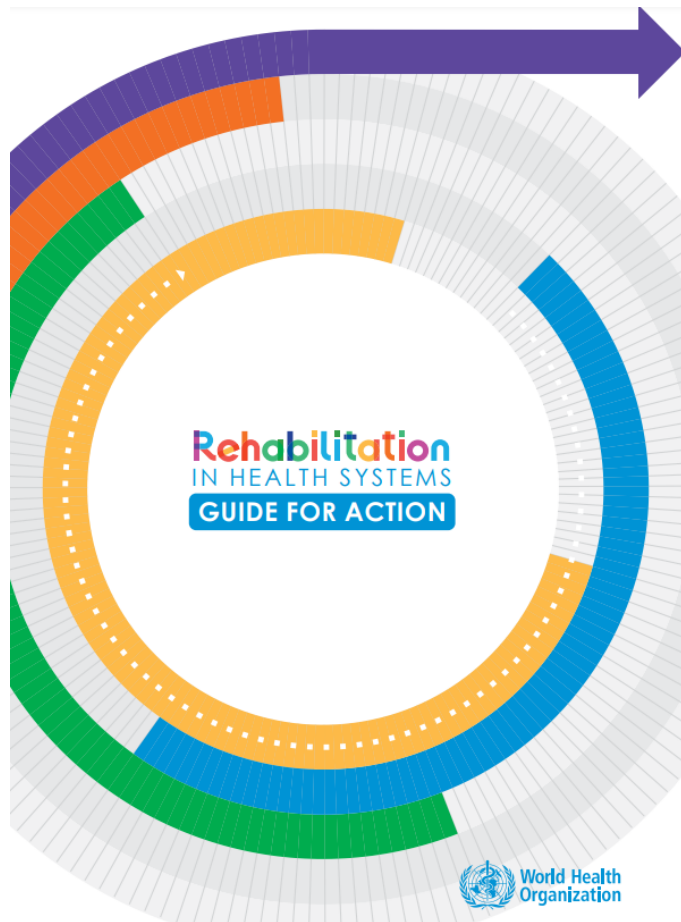
Important domains which lack (sufficient) recommendations:

- ? Sexual and/or intimate relationships.
- ? Vocation and education.
- ? Activities of daily living or leisure activities
- ? Community integration.
- ? Use of public or private owned transportation..
- ? Education concerning socket/liner fitting.
- ? Indication criteria for amputation.
- ? Indication criteria for prosthetic rehabilitation.
- ? Prevention of phantom pain.
- ? Postoperative complications.
- ? The need for life long follow-up.
- ? Description of specific training/rehabilitation programs both pre- and postoperatively.

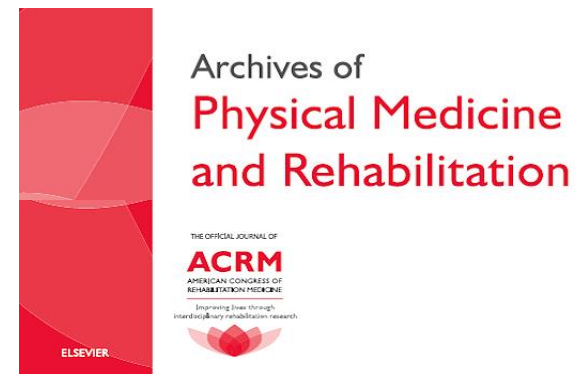
Conclusion

- Only 15 out of 217 (7%) recommendations based on RCT's, SR or MA
- Majority (73%) of the recommendations based on expert opinions
- Future studies
 - fill in the gaps
 - improve the quality of research

Want to know more ?



<https://www.who.int/rehabilitation/rehab-2030-call-for-action/en/>



Manuscript accepted in Archives of Physical Medicine and Rehabilitation, publication date unknown

THANKS TO

SOFIE JACOBS¹

STEFANO NEGRINI^{2,3}

MICHELE PATRINI⁴

ALEXANDRA RAUCHE⁵

AN DE GROEF⁶

CARLOTTE KIEKENS^{1,7}

1. DEPARTMENT OF PHYSICAL AND REHABILITATION MEDICINE, UNIVERSITY HOSPITALS LEUVEN, LEUVEN, BELGIUM.
2. DEPARTMENT OF BIOMEDICAL, SURGICAL AND DENTAL SCIENCES, UNIVERSITY LA STATALE, MILAN, ITALY.
3. IRCCS ISTITUTO ORTOPEDICO GALEAZZI, MILAN, ITALY
4. IRCCS FONDAZIONE DON CARLO Gnocchi, MILAN, ITALY
5. SENSORY FUNCTIONS, DISABILITY AND REHABILITATION UNIT; DEPARTMENT FOR NONCOMMUNICABLE DISEASES; WORLD HEALTH ORGANIZATION; GENEVA, SWITZERLAND.
6. DEPARTMENT OF REHABILITATION SCIENCE AND UNIVERSITY HOSPITALS LEUVEN, UNIVERSITY OF LEUVEN, LEUVEN, BELGIUM.
7. SPINAL UNIT, MONTECATONE REHABILITATION INSTITUTE, IMOLA, BOLOGNA, ITALY