The Educational strategy

Elena Ilieva, **Julia Patrick Enghkasan***

Chair of Physical and Rehabilitation Medicine
Medical University of Plovdiv, Bulgaria

Co-chair of Cochrane Rehabilitation Education Committee

*Chair of Education Committee
University of Malaya

Trusted evidence.
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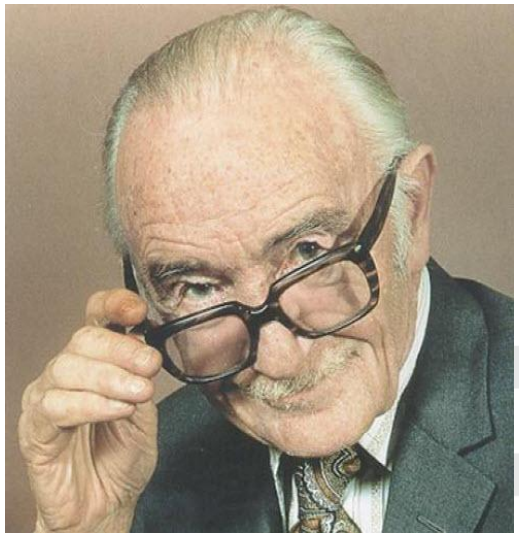
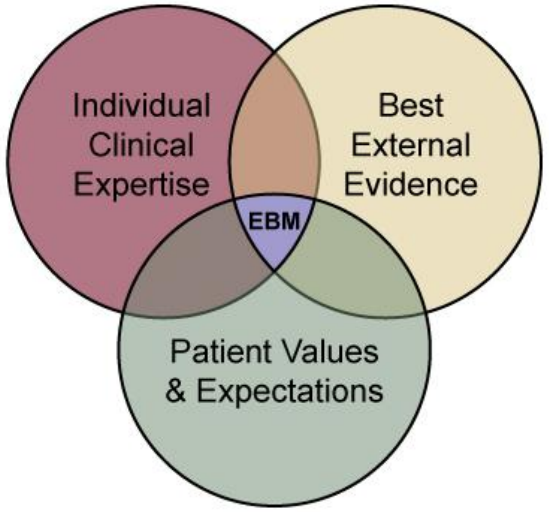
The idea behind weighting of evidence…



Resources will always be limited: they should be used to provide health care which has been shown in properly designed evaluations to be effective (Cochrane, 1972)



"Evidence-based medicine is the integration of best *research evidence* with *clinical expertise* and *patient values*"

- *David Sackett*

Cochrane is the actual gold standard for a good EBM approach

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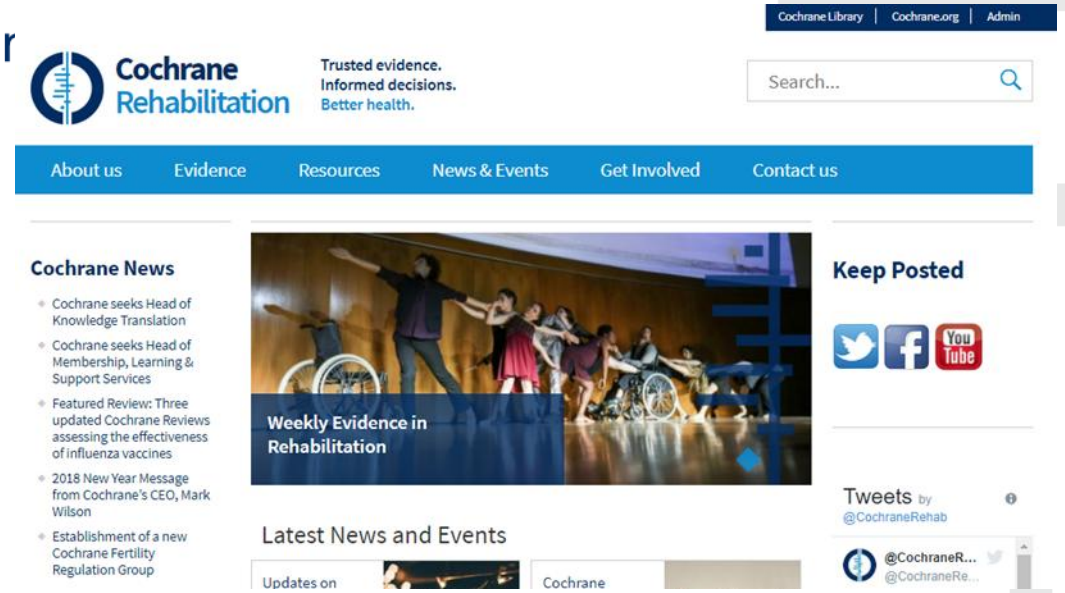
Mission

Allow all rehabilitation professionals to combine the best available evidence as gathered by high quality Cochrane systematic reviews, with their own clinical expertise and the values of patients

Improve the methods for evidence synthesis, to make them coherent with the needs of disabled people and daily clinical practice ir



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Six Goals

To connect stakeholders creating a global network

To provide education and training

To undertake knowledge translation for Cochrane on reviews relevant for rehabilitation

To review and strengthen methodology

Develop a register of systematic reviews relevant to rehabilitation

To promote and advocate for EBCP in rehabilitation

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Education Committee

Goal 4. To promote Evidence Based Clinical Practice and provide education and training on it and on systematic review methods to stakeholders

Chair:
Julia Patrick Engkasan, Malaysia

Co-Chair:
Elena Ileva, Bulgaria

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Planned actions - ABP

- The Education Committee will publish articles on development and application of evidence in rehabilitation, tailoring this information for a rehabilitation audience.
- will run training session on undertaking Cochrane reviews for rehabilitation stakeholders, and will provide support for people working on Cochrane reviews on rehabilitation topics.
- will run training for rehabilitation stakeholders (including healthcare practitioners, healthcare managers, policy makers etc.) on critical appraisal of evidence and application of it to clinical practice
- will develop a repository for sharing training material related to EBCP in rehabilitation.
- will explore ideas and opportunities to provide education and training to low to middle income countries.

Education Committee

Workshops

1. General introduction: what is Cochrane and Cochrane Rehabilitation
   - ECPRM Estoril, 2016;
   - ISPRM Congress, Berlin, 2015
2. Cochrane Rehabilitation results
3. Other EBM workshops

Courses on EBM and Cochrane reviews

1. Core EBM courses

2. Rehabilitation Cochrane Review courses on conducting Cochrane reviews and clinical use of Cochrane reviews.

- during PRM congresses/ online/ summer schools in collaboration with a specific university or society (e.g. ESPRM/ISPRM) - European School Marseille, Mediterranean School, Syracuse.

3. Introduction of EBM courses in the curriculum of the health professionals in rehabilitation /European Board of PRM/

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Workshops & educational sessions

03/2017 – Frankfurt – Reha-Kolloquium 2017

05/2017 – Buenos Aires – International Society of PRM

09/2017 – Cape Town – Global Evidence Summit

11/2017 – Malta – Mediterranean Forum of PRM

11/2017 – Maastricht – Baltic North Sea Forum of PRM

02/2018 – Atlanta – American Academy Physiatry

04/2018 – Vilnius – European Society of PRM

07/2018 – Paris – International Society of PRM

09/2018 – Cochrane Colloquium Edinburgh – 2 workshops submitted

ESPRM European Society of Physical & Rehabilitation Medicine

ISPRM International Society of Physical and Rehabilitation Medicine

Global Evidence Summit

Mediterranean Forum of Physical and Rehabilitation Medicine

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21st European Congress of Physical and Rehabilitation Medicine

Cochrane Rehabilitation Workshop

5th of May

08:30-10:00 ETA HALL. Cochrane Rehabilitation
Systematic reviews: writing, reading, applying.

Chairpersons: Stefano NEGRINI, Carlotte KIEKENS, Elena ILIEVA

1.Elena ILIEVA, Carlotte KIEKENS Introduction

2.Antii MALMIVAARA How to conduct and assess systematic reviews

3.Frane GRUBIŠIĆ How to read a systematic review

4.Stefano NEGRINI Example of a Systematic Review and its application to practice

5.Francesca GIMIGLIANO Knowledge Translation for dissemination of systematic reviews

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Making sense of rehabilitation trials: a critical appraisal workshop for healthcare professionals - Sunday, July 8th, 14:00 - 18:00, 253; Chair – Julia Patrick Engkasan, William Levack

Duration (mins)	Activity / title	Speaker
10	Lecture: Workshop overview & Introduction to EBM	Julia **Patrick Engkasan**
20	Lecture**: Introduction to formulating clinical questions & how to link these to database searches**	Julia **Patrick Engkasan**
20	Small group work: Formulating Clinical questions	All facilitators/speakers
40	Lecture: **Critical appraisal of RCT study**	Jean-Phillipe **Regnaux**
20	Small group work: Appraisal of RCT article	All speakers/facilitators
10	Q&A with whole group re content for the morning	All speakers/facilitators
10	Coffee break	
30	**Critical appraisal of a systematic review**	Antti **Malmivaara**
30	Small group work: Appraisal of systematic review article	All speakers/facilitators
30	**Making sense of study results; what they mean in clinical practice (p-values, 95%Cis, MD, SMD, RR etc)**	William **Levack**
20	**Applying evidence in your practice**	Jure **Aljinović**
10	QA with whole group and wrap up	William **Levack**

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Skills to execute each step of EBM

- Ask answerable clinical question
- Search the evidence
- Appraise the evidence
- Apply the evidence

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Formulate an answerable clinical question

P	I	C	O
Population Patient Problem	Intervention Or Exposure	Comparison	Outcome
Who are the patients? What is the problem?	What do we do to them? What are they exposed to?	What do we compare the intervention with?	What happens? What is the outcome?

The focus question will
Help you in your search strategy

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2. Search for evidence

3. Appraise the evidence

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Critical appraisal sheets

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Critical Appraisal for Therapy Articles

THERAPY STUDY: Are the result

What question did the study a
Patients –
Intervention -
Comparison -
Outcome(s) –

1a. R- Was the assignment of
What is best?
Centralised computer randomisation is and often used in multi-centred trials. trials may use an *independent* person hospital pharmacy) to "police" the randomization.
This paper: Yes ☐ No ☐ Unclear ☐ Comment:
1b. R- Were the groups simila
What is best?
If the randomisation process worked (t achieved comparable groups) the grou should be similar. The more similar the the better it is. There should be some indication of wh differences between groups are statist significant (ie, p values).
This paper: Yes ☐ No ☐ Unclear ☐ Comment:
2a. A – Aside from the allocated treatr
What is best?
Apart from the intervention the patients in the

Look in the ***Methods*** section for the follow-up

▪ SYSTEMATIC REVIEW: Are the results of the review valid?

▪ What question (PICO) did the systematic review address?	
What is best?	Where do I find the information?
The main question being addressed should be clearly stated. The exposure, such as a therapy or diagnostic test, and the outcome(s) of interest will often be expressed in terms of a simple relationship.	The ***Title, Abstract*** *or final paragraph of the* ***Introduction*** should clearly state the question. If you still cannot ascertain what the focused question is after reading these sections, search for another paper!
This paper: Yes ☐ No ☐ Unclear ☐ → ¶ Comment:	
F - Is it unlikely that important, relevant studies were missed?	
What is best?	Where do I find the information?
The starting point for comprehensive search for all relevant studies is the major bibliographic databases (e.g., Medline, Cochrane, EMBASE, etc) but should also include a search of reference lists from relevant studies, and contact with experts, particularly to inquire about unpublished studies. The search should not be limited to English language only. The search strategy should include both MESH terms and text words.	The ***Methods*** section should describe the search strategy, including the terms used, in some detail. The ***Results*** section will outline the number of titles and abstracts reviewed, the number of full-text studies retrieved, and the number of studies excluded together with the reasons for exclusion. This information may be presented in a figure or flow chart.
This paper: Yes ☐ No ☐ Unclear ☐ → ¶ Comment:	
▪ A - Were the criteria used to select articles for inclusion appropriate?	
What is best?	Where do I find the information?
The inclusion or exclusion of studies in a systematic review should be clearly defined a priori. The eligibility criteria used should specify the patients, interventions or exposures and outcomes of interest. In many cases the type of study design	The ***Methods*** section should describe in detail the inclusion and exclusion criteria. Normally, this will include the study design.

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Integrate clinical expertise & patient values

Introduce EBM in practice

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Implementation of EBM in PRM

When evidence is known, a knowledge translation effort is required

CR is the knowledge translation organization for PRM

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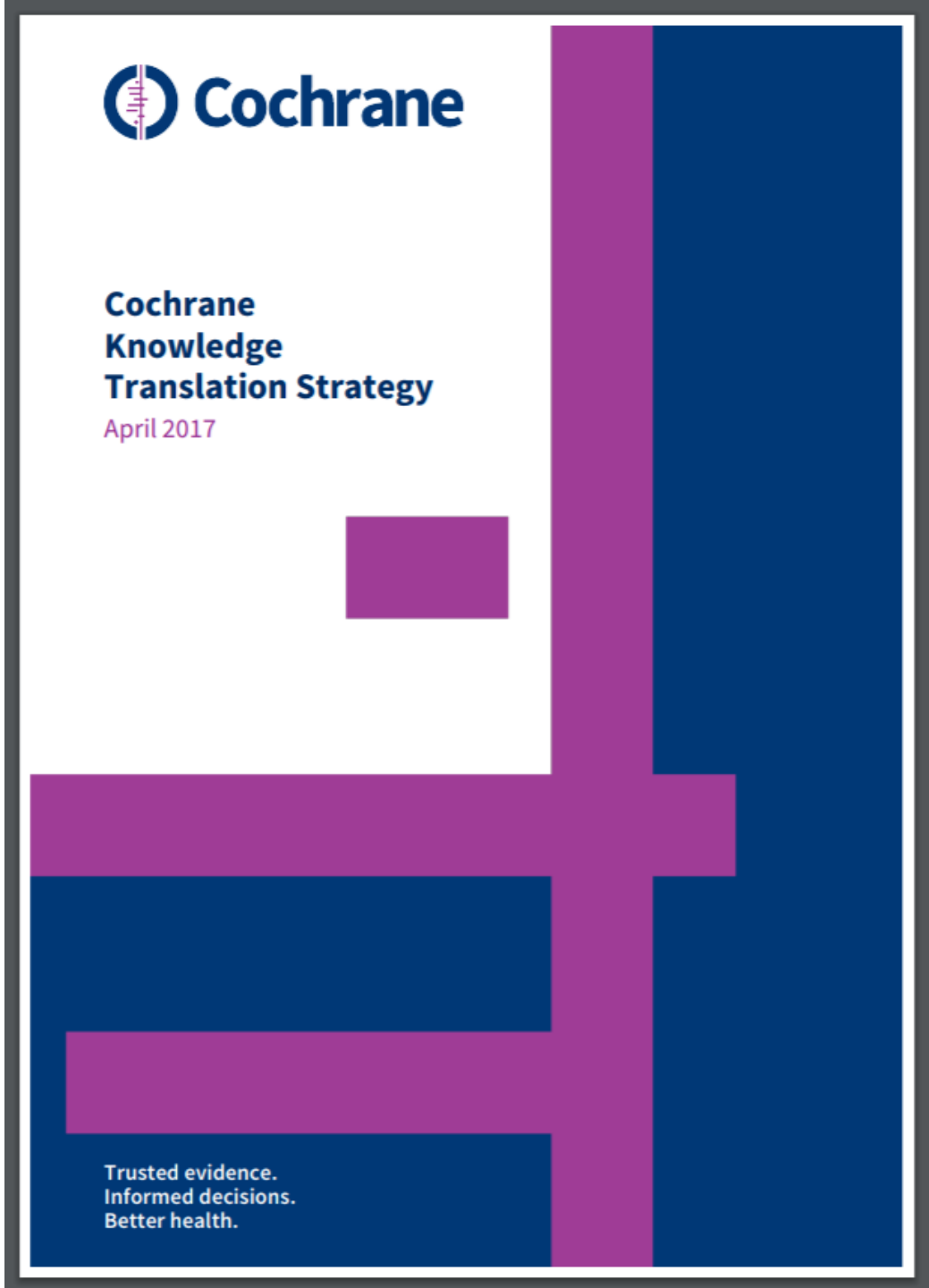
KT framework and implementation plan

KT Advisory Board (Stefano Negrini)

Working Packages

- Embed Prioritization (Stefano Negrini)
- Translate (Francesca Gimigliano)
- Grow capacity in our users (Julia Patrick Engkasan)
- Formalize strategic partnerships (Carlotte Kiekens)
- Build KT infrastructure and KT capacity in Cochrane (Stefano Negrini)
- Evaluate KT Framework (Tracey Hawes)



Knowledge translation strategy

Strategy to 2020 Goal	KT Theme	Work Package Area
Goal Two: Accessible Evidence		
	Facilitating pull	Continuously evolve the Cochrane Library so it makes Cochrane reviews easy to find in appropriate formats and languages
		Grow capacity in our users through development and delivery of training in using Cochrane evidence and (in relation to theme five) in understanding the concept and importance of evidence in decision-making
		Scale up mechanisms for engaging with, and responding to key user groups and meeting their evidence needs

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Issue 7 | April 2018

Call for Education Committee Contributors

Dear Cochrane Rehabilitation Community Member,

Cochrane Rehabilitation has initiated collection of EBM resources for its members. We aim to compile resources like Evidence Based websites related to rehabilitation (for example SCIRE), details of upcoming EBM workshop (online and on-site) and articles related to practice of EBM in rehabilitation.

We would like to invite you to contribute to this effort by providing us the websites addresses and links to the appropriate resources as well as to the relevant articles. We will upload these resources in Cochrane Rehabilitation, which will be of great value to our rehabilitation community.

If you are interested in collaborating in this task, please contact us via e-mail (cochrane.rehabilitation@gmail.com) sending your CV and resources you have. We will acknowledge your contribution accordingly.

Get involved

We are currently looking for:

Education Committee Members
Authors of Cochrane Review Summaries
Translators
Review Taggers
Bloggers

Cochrane Rehabilitation

Announcement to invite collaboraters

Collection of EBM resources like Evidence Based websites related to rehabilitation (SCIRE),

Details of upcoming EBM workshops (online and onsite)

Articles related to practice of EBM in rehabilitation

Websites	Reading List	Courses and workshops
(List of websites specific to rehabilitation)	· Articles ·Books	·Online Courses ·Workshops

On-line courses on EBM

	PROVIDER	COURSE	URL
1.	US Cochrane Center – John Hopkins	Understanding Evidence-based Healthcare: A Foundation for Action	https://courseplus.jhu.edu/core/index.cfm/go/course.home/cid/1739/
		Understanding Evidence-based Healthcare: A Foundation for Action -- Course for Physicians	https://courseplus.jhu.edu/core/index.cfm/go/course.home/cid/1740/
1.	WHO	eLearning Resources: Basic course on Evidence Based Medicine (EBM)	https://extranet.who.int/elearn/login/index.php
1.	GP Synergy	GP Synergy Evidence-Based Medicine (EBM) and Critical Appraisal Online Course for GP registrars	http://evidencebasedmedicine.com.au/?page_id=1515
1.	Canvas Network	Foundations of Evidence-Based Practice in Healthcare (Canvas net)	https://www.mooc-list.com/course/foundations-evidence-based-practice-healthcare-canvas-net
1.	American Academy of Pediatrics	Essentials of Evidence-Based Medicine	https://shop.aap.org/essentials-of-evidence-based-medicine/
1.	Shield Healthcare	What is Evidence-Based Practice	http://www.shieldhealthcare.com/community/health_care_professionals/2016/04/01/free-course-evidence-based-practice-what-it-is-and-what-it-is-not/
1.	Peoples-uni Online Courses and University of Nottingham	Principles of Evidence Based Medicine	http://ooc.peoples-uni.org/course/view.php?id=31

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rehabilitation.cochrane.org

App | Gmail | Homepage | Cochran | Istituto di Istruzione S | Home - PubMed - NC | DeepL Traduttore | Minerva JWelcome Lc | Alitalia - Biglietti aere | Cheap flights to Brus

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Search...

Cochrane News

- An international network for public involvement and engagement in health and social care research
- Cochrane Epilepsy and Cochrane Movement Disorders seeks Research Assistant - Liverpool, UK
- International Women's Day: Cochrane Indonesia's Director reflects on her continued contributions to maternal and perinatal health and the work of Cochrane
- CIS Support Team Member - flexible location
- Cochrane seeks Team Administrator - London, UK

More

Keep Posted

Latest News and Events

Updates on Cochrane Rehabilitation activities

Weekly Evidence in Rehabilitation

Tweets by @CochraneRehab

Scrivi qui per eseguire la ricerca

16:01
17/03/2018

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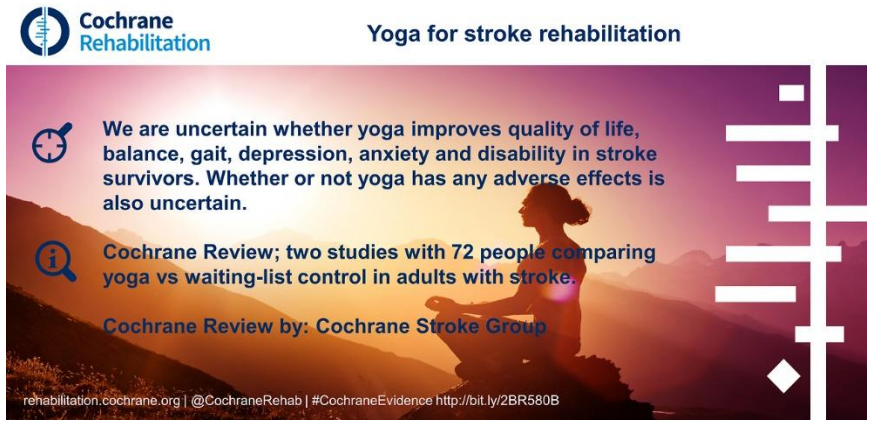
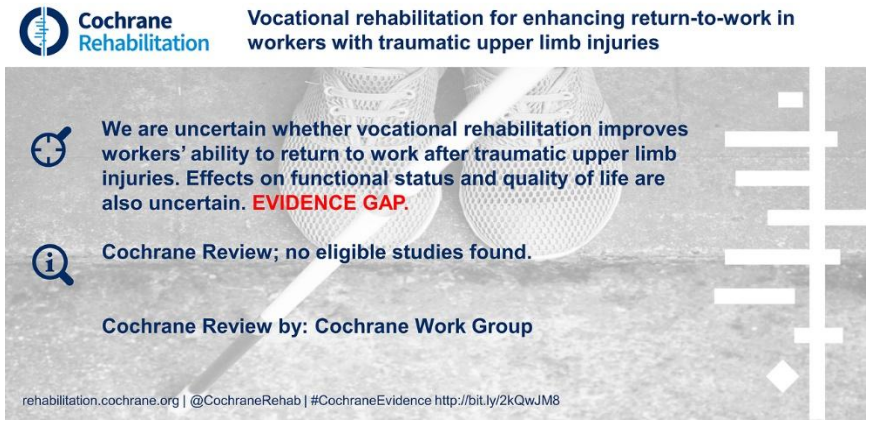
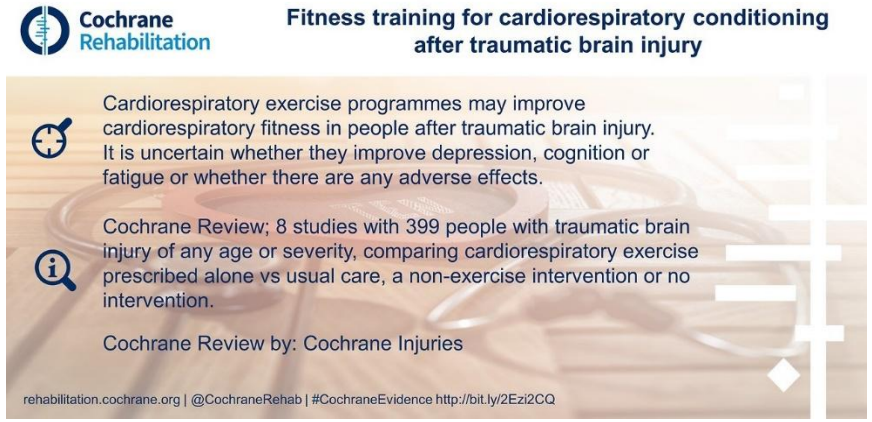
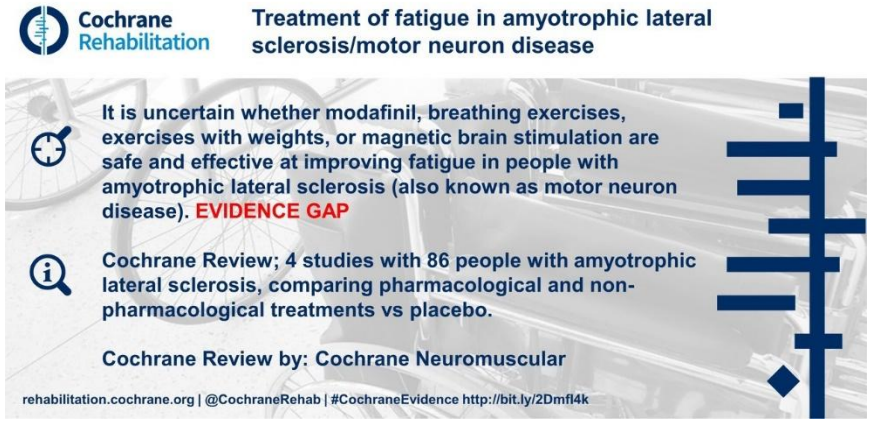
Blogshots









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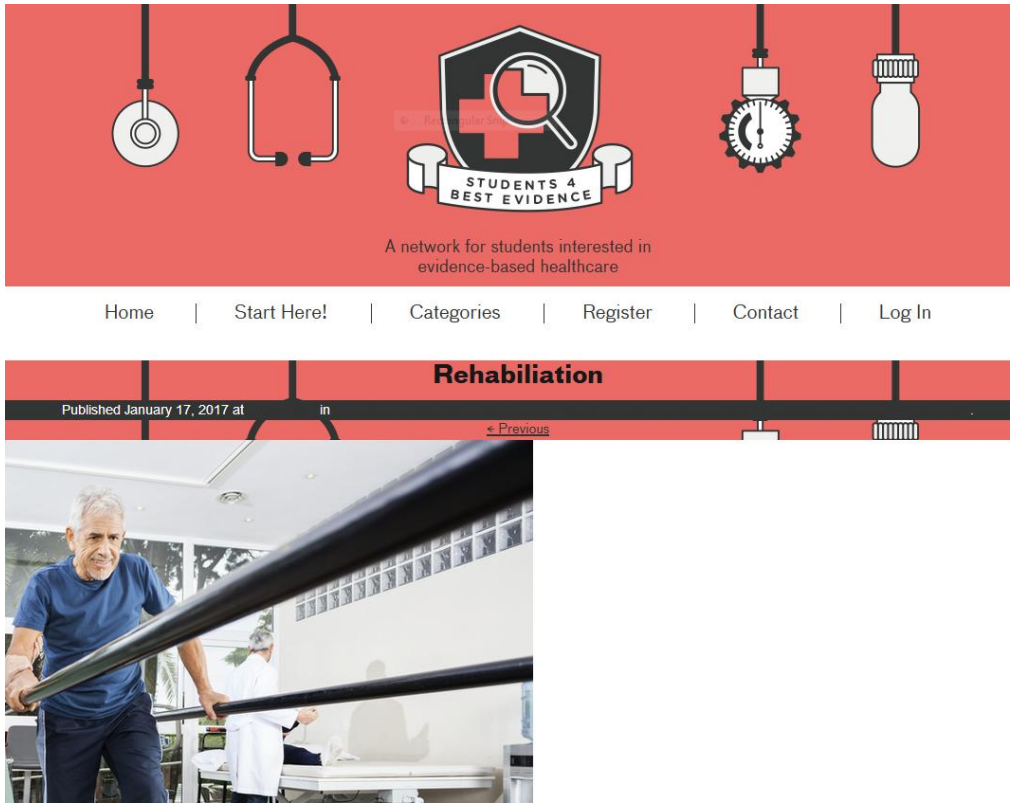
Students For Best Evidence – S4BE in Rehabilitation



Is Acupuncture an effective treatment for chronic low back pain?

This blog is a critical appraisal of a randomized control trial (RCT) looking at the effectiveness of acupuncture for low back pain.

how to critically appraise a paper. This page is continually updated, so do let us know if you know of resources that are missing.

Blinding: taking a better look at the blind side

Blinding is a common element used in rigorously designed trials. Most people are familiar with the general concept but what is its purpose and what is the best way to perform it? This blog by Neelam Khan explores both of these questions and discusses ways to tackle situations where blinding cannot be done.

Comparison of general exercise, motor control exercise and spinal manipulative therapy for chronic low back pain

This blog is a critical appraisal of a Randomized Controlled Trial (RCT) comparing the effects of general exercise, motor control exercise and spinal manipulative therapy on function and perceived effect of intervention in patients with chronic back pain.

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A Survey on EBM in Rehabilitation

Online survey

Julia Patrick Engkhasan

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Objectives

- Describe the training experience
- Describe self perceived understanding & competency related to EBM
- Describe top 5 barriers
- The influence of profession, gender, experience on level of understanding

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EBM Educational Needs Among Rehabilitation Practitioners

Demographic Profile

Age

Gen

Have you ever a

Prof

If yes, please de

Rate your under

tand and could
ain to others

EBM Experiences & Understanding

Barriers to practicing EBM (tick top 5 barriers only)

- ☐ No internet access
- ☐ No time
- ☐ Unable to apply study results to practice
- ☐ Unable to interpret clinical studies
- ☐ No access to full text journals
- ☐ Not familiar with evidence based medicine
- ☐ Lack of interest
- ☐ English proficiency

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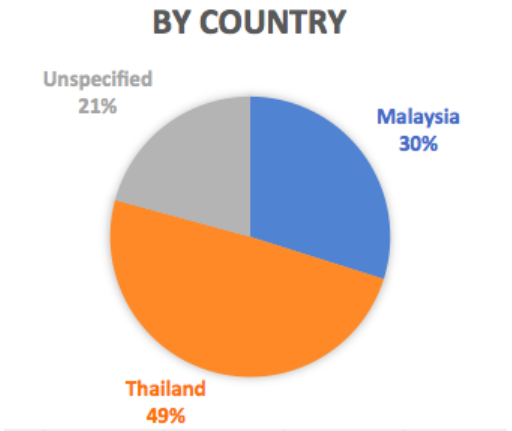
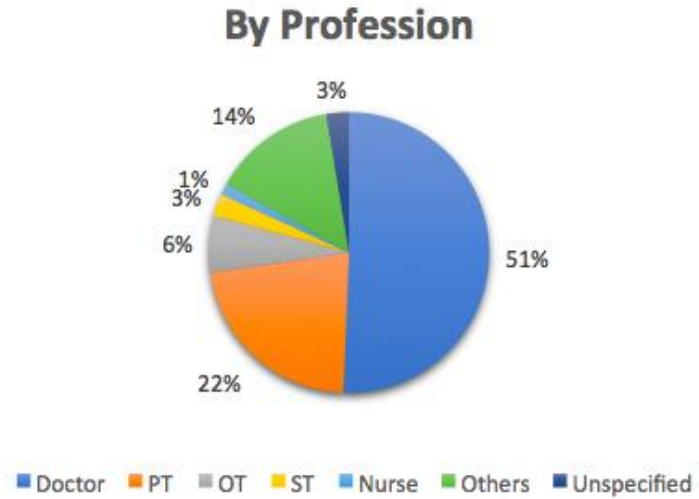
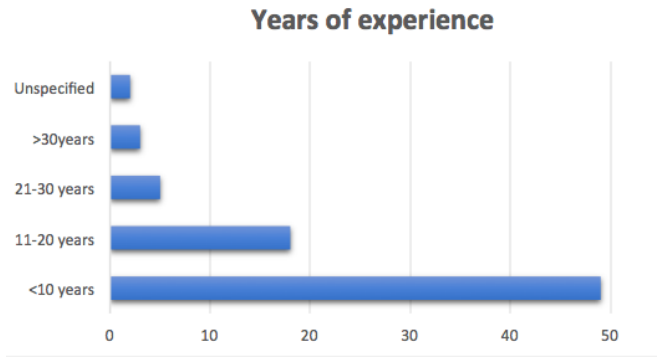
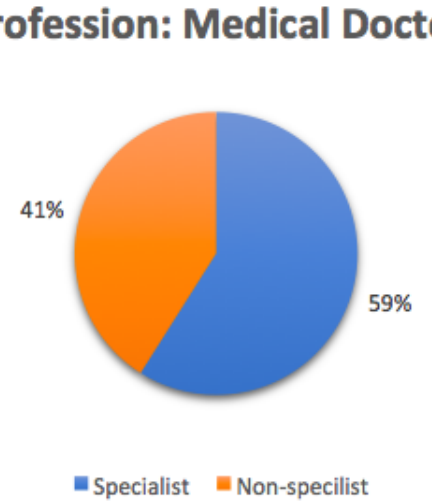
Participants -









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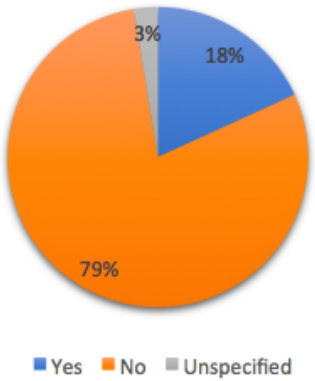
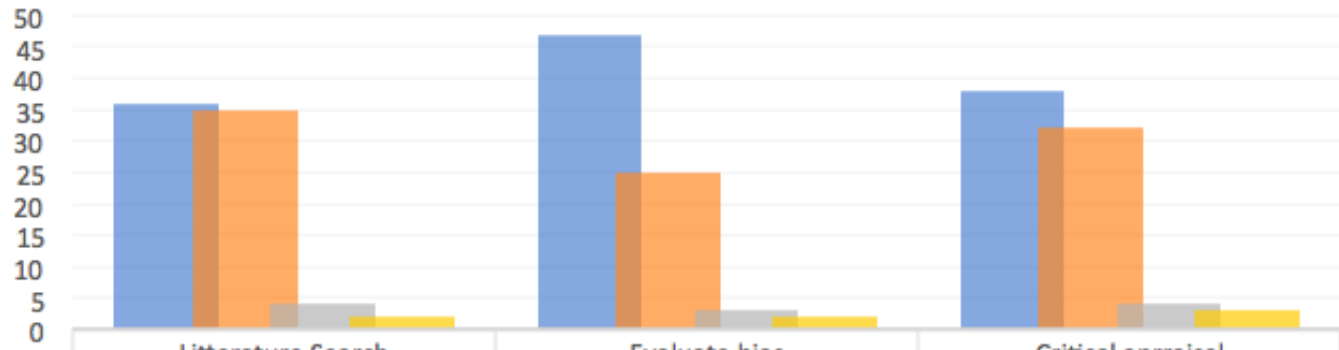
Attended EBM



Skills and competencies



	Litterature Search	Evaluate bias	Critical aprraisal
Low	36	47	38
Moderate	35	25	32
High	4	3	4
Unspecified	2	2	3

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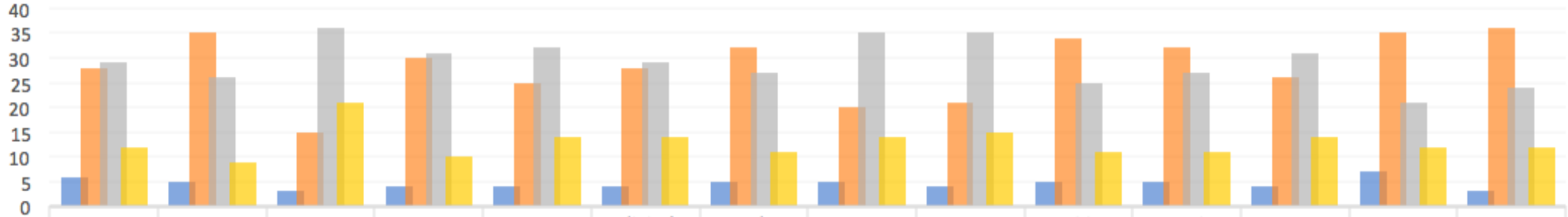
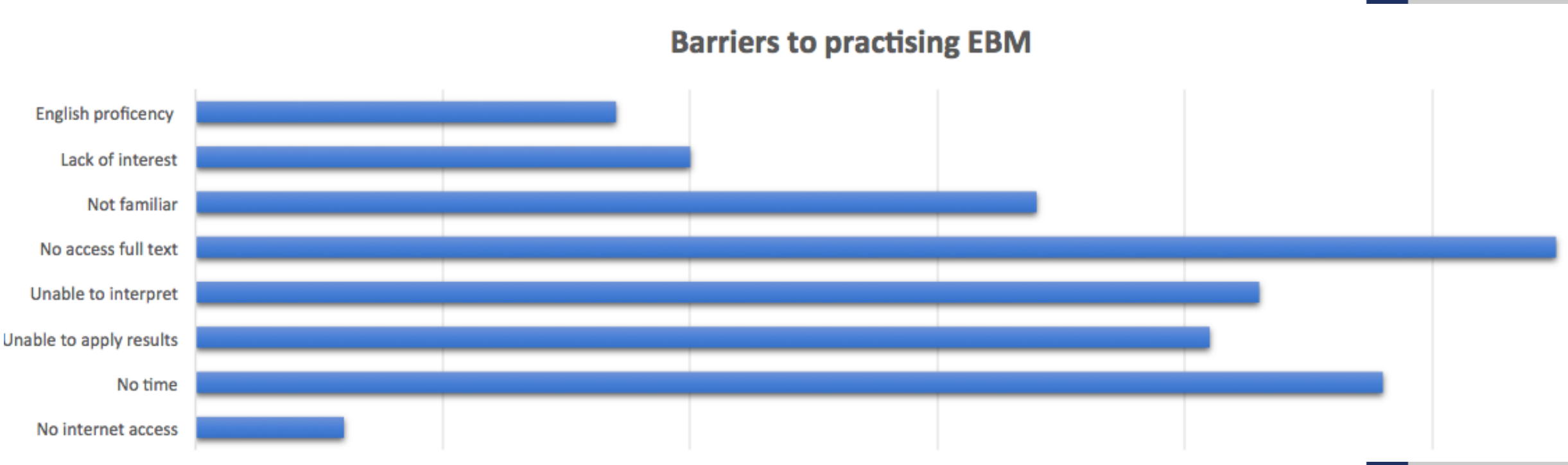
Understanding of EBM terms



	Relative Risk	Absolute Risk	Systematic Review	Odds Ratio	Meta-analysis	Clinical Effectiveness	Number needed to treat	Sensitivity	Specificity	Positive Predictive Value	Negative Predictive Value	Confidence Interval	Heterogeneity	Publication bias
It would not be helpful for me to understand	6	5	3	4	4	4	5	5	4	5	5	4	7	3
Don't Don't understand but would like to	28	35	15	30	25	28	32	20	21	34	32	26	35	36
Some understanding	29	26	36	31	32	29	27	35	35	25	27	31	21	24
Understand and could explain to others	12	9	21	10	14	14	11	14	15	11	11	14	12	12



There is a need for EBM training and education

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Cochrane Rehabilitation e-book

"Live" e-book available for free in Internet to be constantly updated

- In collaboration with and funded by the European PRM Bodies

Titles, abstracts and plain language summaries for:

- clinicians
- PRM trainees, undergraduate medical students, rehabilitation professionals student
- policymakers, patients' associations and other stakeholders

Identify unmet needs of evidence synthesis and activate correct prioritization for future work of Cochrane

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Educational Summary

Target audience:

- Medical or other health professional students

Guideline on the content: The statement should be very simple and easy to understand; basic concepts should be reinforced.

- Description of the disease/syndrome (what is the problem?)
- What is the investigated treatment?
- Brief summary of the results as described in the plain language summary
- Comment on how and if the evidence could change in the future (the quality of evidence says that…)

Students

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Exercise therapy useful against hand ostheoarthritis

Hand osteoarthritis (OA) is the most common form of arthritis characterized by progressive joint deterioration, resulting in joint swelling, inflammation, bony enlargement and bone erosion. This condition mainly affects older women that complain for hand pain, finger joint stiffness and reduced grip strength, which may result in activity limitations and participation restrictions.
There are several symptomatic treatment options for hand OA, aiming to reduce pain and functional disability available. In particular, among non-pharmacological approaches, exercise might be effective and safe for all people with hand OA, in terms of pain relief, improvement of handgrip and pinch strength, hand joint mobility and stability, and overall health, as well as reduction of the use of drugs. This CSR assesses the benefits and harms of exercise compared with no treatment in people with hand OA.
Immediately after treatment, people who completed the exercise programme reported absolute changes of hand pain (-5%), finger joint stiffness (-7%), hand function (+6%), quality of life (+0.3%) compared with people who did not perform exercise. No significant increased number of people experienced adverse events such as increased pain and/or joint swelling.
Further studies, in the future, mighty change the above findings.

Students

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Receive Weekly Evidence in Rehabilitation
http://rehabilitation.cochrane.org
cochrane.rehabilitation@gmail.com
@CochraneRehab

Thank you!