

Cochrane Database of Systematic Reviews



By Razieh Zahedi



THE COCHRANE LIBRARY

Independent high-quality evidence for health care decision making

What is The Cochrane Library?

The screenshot shows the homepage of The Cochrane Library. At the top, there is a search bar with the text 'SEARCH THE COCHRANE LIBRARY' and a dropdown menu for 'Title, Abstract or Keywords'. Below the search bar is a 'GO' button. To the right of the search bar are navigation links: HOME, SIGN UP, LEARN, ACCESS, and HELP. Below the search bar, there is a link to 'Advanced Search'.

The main content area is divided into several sections:

- BROWSE COCHRANE DATABASE OF SYSTEMATIC REVIEWS:** A list of categories with their respective counts: Anaesthesia & pain control (134), Blood disorders (94), Cancer (250), Consumers & communication (29), Dentistry and oral health (103), Developmental, psychosocial, and learning problems (70), Ear, nose, & throat (92), Effective practice/health systems (57), and Endocrine & metabolic (77). There is an 'expand' button and a link to 'Other Browse Options'.
- SPECIAL COLLECTIONS:** Three featured items: 'World Tuberculosis Day (24 March 2010)', 'Cochrane Evidence Aid: resources for Chile and Haiti earthquakes', and 'Cochrane Influenza Resources: evidence from Cochrane reviews'. There is a 'View all' link.
- EDITORIAL:** A section with a photo of a man and text: 'With the launch of this, the new homepage of The Cochrane Library, we reach a landmark in the programme of activities aimed at improving the presentation of Cochrane Reviews to our audience. Our "web programme" aims to ensure that The Cochrane Library is a website built around the needs and preferences of its users...'. There are links for 'Read more' and 'View archive'.
- HIGHLIGHTED NEW AND UPDATED COCHRANE REVIEWS:** A list of review titles with icons: 'Paracetamol/acetaminophen (single administration) for perineal pain in the early postpartum period', 'Service organisation for the secondary prevention of ischaemic heart disease in primary care', 'Medical versus surgical management for gastro-oesophageal reflux disease (GORD) in adults', 'Reduction versus abrupt cessation in smokers who want to quit', 'Saline nasal irrigation for acute upper respiratory tract infections', 'Advance provision of emergency contraception for pregnancy prevention', and 'Antidepressants for depression in physically ill people'. There are also icons for 'Journal Club Article' and 'Podcast Available'.
- COCHRANE CENTRAL REGISTER OF CONTROLLED TRIALS:** A section with a search bar and the text 'Search for trials'.
- BROWSE OTHER RESOURCES:** A section with the text 'The Cochrane Library has a wide range of resources:' and links to 'All Cochrane Library databases', 'Other Reviews (DARE)', 'Methods Studies', 'Technology Assessments', and 'Economic Evaluations'.

On the right side of the homepage, there are two promotional boxes: 'Cochrane Journal Club' with a 'NEW' tag and 'Join the discussion' link, and 'Podcasts from The Cochrane Library'.

The Cochrane Library offers high-quality evidence for health care decision making

anelibrary.com



What is the Cochrane Library?

- **Evidence based:** combining the best research evidence with clinical expertise and patient values
- **Single source:** bringing together international research on the effectiveness of healthcare treatments and interventions
- **Extensive:** over 6,000 Cochrane systematic reviews and over 650,000 other records, covering clinical trials, methods, technology and economic evaluations
- **Quality:** Impact Factor of 5.653
- **Reliable:** adhere to a strict methodology to ensure Cochrane reviews are comprehensive, thus minimizing bias
- **Up-to-Date:** Cochrane Reviews are updated monthly - ensuring that treatment decisions can be based on the most up-to-date, reliable evidence
- **Easy to use:** flexible viewing and searching functionality (including MESH) ³



The Cochrane Collaboration

- **Structure** - established as an international organisation in 1993, registered as a charity in the U.K.
- **Aim** - to help people make well-informed decisions about health care.
- **How** - by preparing and maintaining, and promoting access to, systematic reviews of the effects of healthcare interventions.





The Cochrane Database of Systematic Reviews

- ✓ Over 6,000 full text Cochrane reviews and protocols (html & PDF format)
- ✓ Cochrane reviews adhere to a strict process, minimizing bias and ensuring reliability.
- ✓ The process begins with a protocol – a plan or set of steps to be followed in a study.

BROWSE COCHRANE DATABASE OF SYSTEMATIC REVIEWS

[Anaesthesia & pain control](#) (134)

[Blood disorders](#) (94)

[Cancer](#) (250)

[Consumers & communication](#) (29)

[Dentistry and oral health](#) (103)

[Developmental, psychosocial, and learning problems](#) (70)

[Ear, nose, & throat](#) (92)

[Effective practice/health systems](#) (57)

[Endocrine & metabolic](#) (77)

[Eyes & vision](#) (78)

[Gastroenterology](#) (256)

[Genetic disorders](#) (82)

[Gynaecology](#) (273)

[Heart & circulation](#) (328)

[Kidney disease](#) (117)

[Lungs & airways](#) (426)

[Mental health](#) (318)

[Methodological & diagnostic](#) (17)

[Neonatal care](#) (263)

[Neurology](#) (468)

[Orthopaedics & trauma](#) (283)

[Pregnancy & childbirth](#) (359)

[Public health](#) (2)

[Rheumatology](#) (169)

[Skin](#) (85)

[Tobacco, drugs, & alcohol dependence](#) (102)

[Urology](#) (87)

[Wounds](#) (65)

Cochrane Logo



Cochrane Collaboration's Vision

That healthcare decision-making around the world will be informed by high-quality, timely research evidence, and that The Cochrane Collaboration will play a pivotal role in the production and dissemination of this evidence across all areas of health care, including complementary medicine.



What is a Systematic Review?

- Identify an intervention for a specific disease or other problem in health care
- Ask whether or not this intervention works
- Locate, appraise and synthesize evidence from relevant scientific studies
- Summarize conclusions about effectiveness



What is the Cochrane Library?

- A collection of databases
- Main output of the Cochrane Collaboration
- Highest level of evidence on which to base clinical treatment decisions



What is in the Cochrane Library?

Cochrane Database of Systematic Reviews (Cochrane Reviews)

Regularly updated summaries of the best available evidence prepared by members of the Cochrane Collaboration.

- The first and foremost is the Cochrane Database of systematic reviews. A Cochrane systematic review identifies an intervention for a specific disease or other problem in healthcare and determines whether or not this intervention works.
- If there is no review on a specific topic, the other databases in The Cochrane Library will provide information on other good quality reviews and randomized controlled trials.

Database of Abstracts of Reviews of Effects (DARE)

Other published reviews prepared by people outside of the Cochrane Collaboration.



More Cochrane Library Databases

Cochrane Central Register of Controlled Trials (CENTRAL)

Where to look if you want to track down the original studies (primary studies) – the largest single source of controlled trials.

Cochrane Methodology Register (CMR)

As exciting as it sounds! Where to find studies which look at the science of systematic reviewing.

Health Technology Assessment Database (HTA)

An international collection of health technology assessments.

NHS Economic Evaluation Database (NHS EED)

International economic evaluations of health care interventions.

About the Cochrane Collaboration (About)

Where to look for information about Cochrane review groups and other activities of the Cochrane Collaboration.



The Cochrane Library

Cochrane Reviews (CDSR)

4400 complete reviews and 2500 protocols



Top 10 Accessed Worldwide, 2007

- See which reviews are getting the most attention from *Cochrane Library* users...
 1. Interventions for preventing falls in elderly people
 2. Interventions for preventing obesity in children
 3. Beta-blockers for hypertension



Ways to search the Cochrane Library

- From The Cochrane Library homepage you can either choose to **browse** the content or use one of several **search** options:
 - Basic
 - Advanced
 - MeSH





THE COCHRANE LIBRARY

Independent high-quality evidence for health care decision making

from [The Cochrane Collaboration](#)

SEARCH THE COCHRANE LIBRARY

Title, Abstract or Keywords ▾

GO

HOME 

SIGN UP 

LEARN 

ACCESS 

HELP 

Searching 

BROWSE COCHRANE DATABASE OF SYSTEMATIC REVIEWS

Issue 10 of 12, Oct 2011

[Anaesthesia & pain control](#) (175)

[Blood disorders](#) (111)

[Cancer](#) (362)

[Child health](#) (1302)

[Complementary & alternative medicine](#) (494)

[Consumer & communication strategies](#) (40)

[Dentistry & oral health](#) (117)

Browsing 

SPECIAL COLLECTIONS



Cochrane Evidence Aid:
resources for earthquakes



Breast cancer detection



Care homes for older people

[View all](#)

EDITORIAL

We need access to all data from all clinical trials



A variety of international organisations, funders, and others have made calls for sharing research data.

These calls have mostly been restricted to publicly funded research, but if the over-riding objective of healthcare research is to improve patient care and health policy, the distinction between publicly funded

NEW



Cochrane Journal Club
Join the discussion

COCHRANE METHODS



[CLICK HERE](#) 



Wiley InterScience home

My Profile Log In



The Cochrane Library

Evidence for healthcare decision-making



BROWSE

Cochrane [By Topic](#) | [New Reviews](#) | [Updated Reviews](#) | [A-Z](#) | [By Review Group](#)
Reviews: [Other Reviews](#) | [Clinical Trials](#) | [Methods Studies](#) |
Resources: [Technology Assessments](#) | [Economic Evaluations](#)

SEARCH

Enter search term Title, Abstract or Keyw

[Advanced Search](#) | [MeSH Search](#) | [Search History](#) | [Saved Searches](#)

- [Electrotherapy for neck disorders](#)
- [Exercise therapy for treatment of non-specific low back pain](#) Comment
- [Exercises for mechanical neck disorders](#)
- [Herbal medicine for low back pain](#)
- [Individual patient education for low back pain](#)
- [Injection therapy for subacute and chronic benign low-back pain](#) Withdrawn
- [Insoles for prevention and treatment of back pain](#)
- [Low level laser therapy for nonspecific low-back pain](#) New search Conclusions changed Comment
- [Lumbar supports for prevention and treatment of low back pain](#) New search Conclusions changed
- [Manipulation and mobilisation for mechanical neck disorders](#)
- [Manual material handling advice and assistive devices for preventing and treating back pain in workers](#) Comment
- [Massage for low-back pain](#)
- [Massage for mechanical neck disorders](#)
- [Medicinal and injection therapies for mechanical neck disorders](#)
- [Multidisciplinary bio-psycho-social rehabilitation for chronic low-back pain](#) Withdrawn
- [Multidisciplinary biopsychosocial rehabilitation for neck and shoulder pain among working age adults](#)
- [Multidisciplinary biopsychosocial rehabilitation for subacute low-back pain among working age adults](#)
- [Muscle relaxants for non-specific low-back pain](#) Comment
- [Neuroreflexotherapy for non-specific low-back pain](#)
- [Non-steroidal anti-inflammatory drugs for low back pain](#) Comment
- [Opioids for chronic low-back pain](#)
- [Patient education for mechanical neck disorders](#) Withdrawn
- [Physical medicine modalities for mechanical neck disorders](#) Withdrawn



The Cochrane Library

Evidence for healthcare decision-making

BROWSE

- Cochrane [By Topic](#) | [New Reviews](#) | [Updated Reviews](#) | [A-Z](#) | [By Review Group](#)
- Reviews: [Other Reviews](#) | [Clinical Trials](#) | [Methods Studies](#)
- Resources: [Technology Assessments](#) | [Economic Evaluations](#)

SEARCH

Enter search term Title, Abstract or Keyw

[Advanced Search](#) | [MeSH Search](#) | [Search History](#) | [Saved Searches](#)

[Collapse All](#)

- ⊕ Acute Respiratory Infections (145)
- ⊕ Airways (268)
- ⊕ Anaesthesia (123)
- ⊕ Back (57)
 - ⊕ [Cervical spine \(17\)](#)
 - ⊕ Brachial Plexus (0)
 - Cervico-brachial neuralgia (0)
 - Thoracic outlet syndrome (Liaison with Neuromuscular Disease Group) (0)
 - Thoracic spine (0)
 - ⊕ Lumbar spine (39)
 - ⊕ No specific localization (1)
- ⊕ Bone, Joint and Muscle Trauma (179)

Searching the Cochrane Library

- Search using “basic”
- Searching using “advanced”
- Search using MeSH (Medical Subject Headings)
- Devise a complex search strategy



Wiley InterScience home

My Profile Log In

Home | About Cochrane | Access to Cochrane | For Authors | Help | Save Title to My Profile



The Cochrane Library

Evidence for healthcare decision-making

BROWSE

Cochrane [By Topic](#) | [New Reviews](#) | [Updated Reviews](#) | [A-Z](#) | [By Review Group](#)
Reviews: [Other Reviews](#) | [Clinical Trials](#) | [Methods Studies](#) |
Resources: [Technology Assessments](#) | [Economic Evaluations](#)

SEARCH

Title, Abstract or Key

[Advanced Search](#) | [MeSH Search](#) | [Search History](#) | [Saved Searches](#)

[Advanced Search](#) | **[MeSH Search](#)** | [Search History](#) | [Saved Searches](#)
[Search by qualifier alone](#)

Search for a MeSH descriptor

Enter MeSH term:

SEARCH TIPS

Using the MeSH Search
Find records using the MeSH thesaurus search through the following methods.

Thesaurus Search Options

Use the thesaurus to find a term for a MeSH Tree Search. Enter word in text box and click on Thesaurus to display the complete index of all MeSH descriptors that include the word. Click on an index term to select it for a MeSH Tree Search (see below).

MeSH Tree Search Options

Enter a term in the text box

Advanced Search

For greater flexibility choose the **Cochrane Advanced Search**

The Advanced Search screen allows you to build searches by combining several different concepts using Boolean operators (AND, OR or NOT) and lets you limit your search according to particular databases, types of record or year(s).



BROWSE
Cochrane [By Topic](#) | [New Reviews](#) | [Updated Reviews](#) | [A-Z](#) | [By Review Group](#)
Reviews:
Other [Other Reviews](#) | [Clinical Trials](#) | [Methods Studies](#) |
Resources: [Technology Assessments](#) | [Economic Evaluations](#)

SEARCH
Enter search term Title, Abstract or Keyw Go
[Advanced Search](#) | [MeSH Search](#) | [Search History](#) | [Saved Searches](#)

Advanced Search | [MeSH Search](#) | [Search History](#) | [Saved Searches](#)
Enter a term below and click Search to continue.

SEARCH TIPS
Tip No. 1:
Boolean operators AND, OR, and NOT can be selected from the pulldown selection boxes or entered directly within the search text boxes. Use parentheses to separate components when entering complex search directly in text box with mixed Boolean operators.
Example: *(colchicine AND liver) AND (fibrosis OR cirrhosis)*
Tip No. 2:
The AND operator is used by default between search terms. The string *brain stem* will match records where both words are included in any order or

Search For: In:
To search using field labels (e.g. heart:ti) use the [Search History](#) page.

osteoarthritis	Search All Text
AND knee	Search All Text
AND Enter search term 3	Author
AND Enter search term 4	Abstract
AND Enter search term 5	Keywords

Search Go directly to Search History

Restrict Search by Product
 All of The Cochrane Library

Wiley InterScience home

My Profile Log In

Home | About Cochrane | Access to Cochrane | For Authors | Help | Save Title to My Profile



The Cochrane Library

Evidence for healthcare decision-making

BROWSE

Cochrane [By Topic](#) | [New Reviews](#) | [Updated Reviews](#) | [A-Z](#) | [By Review Group](#)
Reviews: [Other Reviews](#) | [Clinical Trials](#) | [Methods Studies](#) |
Resources: [Technology Assessments](#) | [Economic Evaluations](#)

SEARCH

Title, Abstract or Key

[Advanced Search](#) | [MeSH Search](#) | [Search History](#) | [Saved Searches](#)

[Advanced Search](#) | [MeSH Search](#) | [Search History](#) | [Saved Searches](#)
[Search by qualifier alone](#)

Search for a MeSH descriptor

Enter MeSH term:

SEARCH TIPS

Using the MeSH Search
Find records using the MeSH thesaurus search through the following methods.

Thesaurus Search Options

Use the thesaurus to find a term for a MeSH Tree Search. Enter word in text box and click on Thesaurus to display the complete index of all MeSH descriptors that include the word. Click on an index term to select it for a MeSH Tree Search (see below).

MeSH Tree Search Options

Enter a term in the text box

Wiley InterScience home

My Profile Log In



The Cochrane Library

Evidence for healthcare decision-making

Home | About Cochrane | Access to Cochrane | For Authors | Help | Save Title to My Profile



BROWSE

Cochrane [By Topic](#) | [New Reviews](#) | [Updated Reviews](#) | [A-Z](#) | [By Review Group](#)
Reviews: [Other](#) | [Other Reviews](#) | [Clinical Trials](#) | [Methods Studies](#) |
Resources: [Technology Assessments](#) | [Economic Evaluations](#)

SEARCH

Enter search term Title, Abstract or Key
[Advanced Search](#) | [MeSH Search](#) | [Search History](#) | [Saved Searches](#)

[Advanced Search](#) | [MeSH Search](#) | [Search History](#) | [Saved Searches](#)
[Search by qualifier alone](#)

Search for a MeSH descriptor

Enter MeSH term:

Search The Cochrane Library content

Go directly to Search History

Add qualifier restriction:

	Explode	Tree Number 1
All	<input checked="" type="checkbox"/>	Musculoskeletal Diseases [+12]
		Joint Diseases [+24]
		Arthritis [+11]
Tree Number 1	<input checked="" type="checkbox"/>	Osteoarthritis [+3]
Tree Number 2	<input checked="" type="checkbox"/>	Osteoarthritis, Hip

SEARCH TIPS

Using the MeSH Search
Find records using the MeSH thesaurus search through the following methods.

Thesaurus Search Options

Use the thesaurus to find a term for a MeSH Tree Search. Enter word in text box and click on Thesaurus to display the complete index of all MeSH descriptors that include the word. Click on an index term to select it for a MeSH Tree Search (see below).

MeSH Tree Search Options

Enter a term in the text box

Organizing the search....

- PICO - A well-formulated question makes it easier to produce the strategy and find the evidence
- Strategy will be based on controlled vocabulary (Medical Subject Headings), and text words (develop list of key terms, synonyms)



Start with PICO

Patient/**P**opulation

Intervention

Comparison

Outcome



Framing the question

Are aquatic-exercise interventions in the treatment of knee and hip osteoarthritis effective and safe?

- In patients with *knee or hip osteoarthritis* (population)
- Are aquatic-exercise interventions (intervention)
- No comparator (comparison)
- *Effective and safe?* (outcome)?



PICO

Patient group

- Knee osteoarthritis
- Hip osteoarthritis

Intervention

- Aquatic exercise interventions



PICO

Patient group

- osteoarthritis, knee (MeSH)
- osteoarthritis, hip (MeSH)
- (osteoarthritis OR osteoarthros*)
AND (knee OR hip)

Intervention

- hydrotherapy (MeSH)
- balneology (MeSH)
- swimming (MeSH)
- balneotherap*
- aquatic NEXT exercis*
- (aquatic OR water) NEXT sport*
- pool NEXT therap*
- water NEXT aerobic*
- water NEXT exercis*
- water NEXT run*
- water NEXT training
- water NEXT gymnastic*
- (water* OR aquatic OR pool) AND
physiotherapy



Reading the Reviews

- Results screen defaults to the Cochrane Database of Systematic Reviews (CDSR)
- Reviews and Protocols (restrict to reviews)
- Layers of detail

The **Abstract** summarizes the objectives, methods, results and conclusions.

The **Synopsis** is a 100-word plain language summary found directly beneath the abstract, with pointers to sections of the full review.

(http://www.nicsl.com.au/cochrane/guide_tell.asp)

Full review provides background, detailed methods, details of the individual trials, reviewers' conclusion and maybe comments posted by readers, and the authors' responses.



Lead-in Tools

- MeSH thesaurus (www.pubmed.org)
- Mayo Clinic
- Wikipedia



Accessibility

- Podcast summaries of certain topic

<http://cochrane.org/podcasts/index.htm>

