



# The Cochrane Library

Evidence for healthcare decision-making

## Conduct a systematic search in Cochrane Library

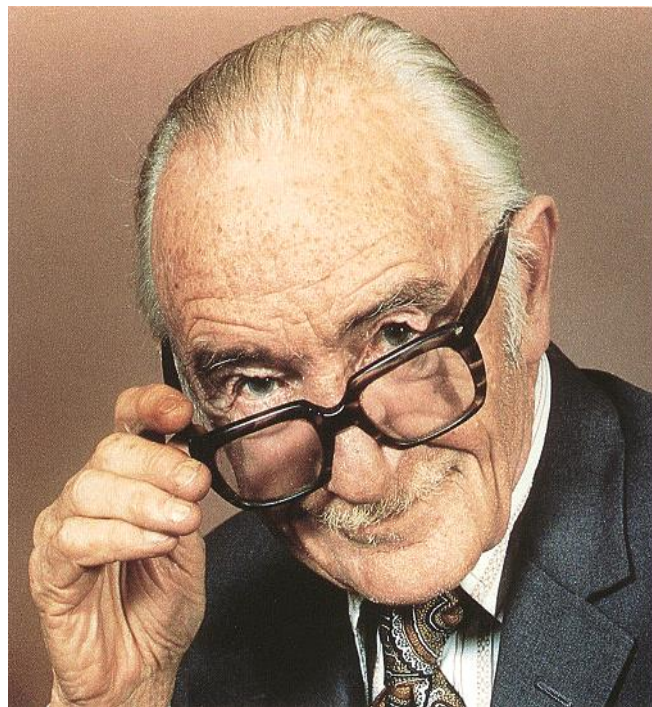
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# Archie Cochrane



“It is surely a great criticism of our profession that we have not organised a critical summary, by specialty or subspecialty, adapted periodically, of all relevant randomised controlled trials.”



# The Cochran Collaboration

**International non-profit organisation that prepares, maintains, and disseminates systematic up-to-date reviews of health care interventions**

has more than 35000 contributors from 130 countries



# THE COCHRANE COLLABORATION

- **Structure** - established as an international organisation in 1993.
- **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.
- **Publishing Output** – The Cochrane Library by Wiley Publisher



**The Cochran Library provides information and evidence to support decisions taken in health care and to inform those receiving care.**



## WHAT IS THE COCHRANE LIBRARY?

- The Cochrane Database of Systematic Reviews (**Cochrane Reviews**)
- The Database of Abstracts of Reviews of Effects (**Other Reviews**)
- The Central Register of Controlled Trials (**Clinical Trials**)
- The Cochrane Methodology Register (Methods Studies)
- Health Technology Assessment Database – HTA (Technology Assessments)
- NHS Economic Evaluation Database – NHS EED (Economic Evaluations)
- It also contains information about The Cochrane Collaboration and the Cochrane Collaborative Review Groups

# *Cochrane Database of Systematic Reviews (CDSR)*

includes

- Cochrane Reviews (the systematic reviews)
- protocols for Cochrane Reviews
- Editorials

# How large is the Cochrane Reviews database?

<b>Database</b>	<b>Total records</b>
<i>Cochrane Database of Systematic Reviews</i> A breakdown of CDSR content is available <a href="#">here</a>	10,078
Cochrane Central Register of Controlled Trials	1,121,096
Cochrane Methodology Register	15,764
Database of Abstracts of Reviews of Effect	36,795
Health Technology Assessment Database	16,559
NHS Economic Evaluation Database	15,015
About The Cochrane Collaboration	78



## Impact factor

- (*CDSR*) impact factor describes the ratio of the number of Cochrane Reviews published, for example, during 2010 and 2011 to the number of citations these reviews received in 2012.
- The CDSR received its first impact factor in 2007
- 2016 6.124
- 2015 6.103
- 2014 6.035
- 2013 5.939
- 2012 5.785
- 2011 5.912
- 2010 6.186
- 2009 5.653
- 2008 5.182
- 2007 4.654

## Cochrane Central Register of Controlled Trials(CENTRAL)

- Is a highly concentrated source of reports of **randomised and quasi-randomised controlled trials**. (900,000)
- The majority of CENTRAL records are taken from bibliographic databases (**mainly MEDLINE and Embase**),
- but records are also derived from **other published** and unpublished sources.
- In addition to bibliographic details (author, source, year, etc.) CENTRAL records will **often include an abstract** (a summary of the article). They do not contain the full text of the article.

## Database of Abstracts of Reviews of Effects(DARE)

- Is the database to contain **abstracts of systematic reviews** that have been quality-assessed (37,000)
- DARE covers a broad range of health related interventions and thousands of abstracts of reviews in fields as diverse as **diagnostic tests, public health, health promotion, pharmacology, surgery, psychology, and the organization and delivery of health care.**
- DARE was produced by the [Centre for Reviews and Dissemination](#) at the University of York, UK, until April 2015.



## Cochrane Methodology Register (CMR)

- Is a **bibliography** of publications that report on methods used in the conduct of controlled trials.
- includes **journal articles, books, and conference proceedings**
- CMR records contain the title of the article, information on where it was published (**bibliographic details**), and, in some cases, a summary of the article. They do not contain the full text of the article.
- **the database has not been updated since July 2012**

## Health Technology Assessment Database(HTA)

- brings together details of completed and ongoing **health technology assessments** (studies of the medical, social, ethical, and economic implications of healthcare interventions) from around the world.
- The aim of the HTA Database is to improve the **quality and cost-effectiveness** of health care.
  - جزئیات ارزیابی فناوری سلامت تکمیل شده و در حال انجام (مطالعات پیامدهای پزشکی، اجتماعی، اخلاقی، اقتصادی و مداخلات بهداشت و درمان) از سراسر جهان را گرد هم می آورد. هدف از پایگاه HTA بهبود کیفیت و مراقبت های بهداشتی مقرون به صرفه.



# NHS Economic Evaluation Database

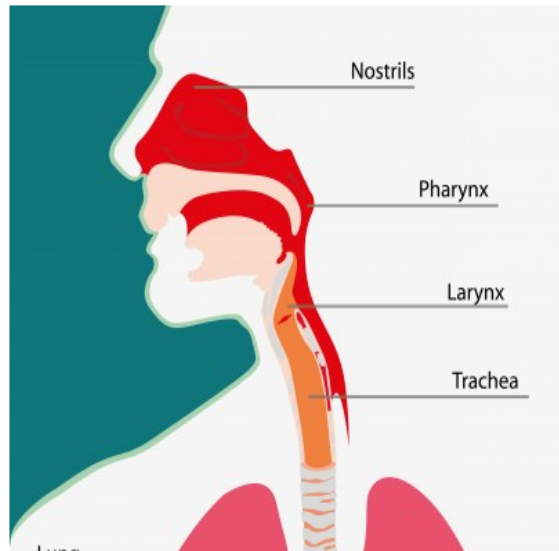
- healthcare resources are finite, information about both **costs and effects** are essential to making evidence-based decisions about competing healthcare interventions.

## About The Cochrane Collaboration database

- The About The Cochrane Collaboration database contains information on the **Cochrane groups** within Cochrane.
- The database includes contacts and information on the **aims and scope** of the Cochrane Review Groups, Methods Groups, Fields, and Networks, along with information about Cochrane Centres and the Cochrane Editorial Unit.

# Cochrane Review Groups

- 53 Cochrane Review Groups.
- Each Cochrane Review Group focuses on a specific topic area and is led by a Co-ordinating Editor(s) and an editorial team including a Managing Editor and Trials Search Co-ordinator.
- Authors interested in preparing a Cochrane Review should **contact** the Cochrane Review Group



Tweets by @CochraneARI

### Cochrane News

- ◆ Cochrane Making a Difference: Midwifery
- ◆ World No Tobacco Day 2016
- ◆ Seoul Colloquium news
- ◆ The Cochrane-Wikipedia partnership in 2016
- ◆ What is the state of

# different Access Ways




- Simple and advanced search
- Browse by Topic
- Browse by Cochrane Review Group(CRG)



## Cochrane Journal Club

- each Cochrane Journal Club covers a single review of special interest, selected from the new and updated reviews published in the Cochrane Library.
- They highlight practice-changing findings, controversial conclusions, new methodology, evidence-based methods, and reviews from diverse health and social care topics.

**READ ORIGINAL PAPER**

-  Jump to Abstract
-  PDF Options
-  Access via Library

**JOIN THE CLUB**

Sign up to receive alerts for new Cochrane Journal Club articles.

**ASK A QUESTION**

Ask the authors a question and receive a reply

**SEARCH COCHRANE**

You are currently viewing the Clinical version of this article. Methodological Version unavailable

## Antifungal agents for preventing fungal infectio neutropenic critically ill patients

### Clinical Summary

Invasive fungal infections are important causes of morbidity and mortality among critically ill patients. Patients in intensive care units (ICU) have different risk factors for the development of fungal infections, including use of broad-spectrum antibiotics, disruption of natural barriers by surgery or implanted devices, fungal colonization, and impairment of immunological response. These fungal infections impose an important economic burden, mainly due to prolonged ICU stay, cost of the antifungal drugs needed to treat them and overall use of hospital resources. Among fungal pathogens, *Candida* species are the most commonly isolated microorganisms. They are the third most commonly isolated pathogens in ICU patients and studies have found attributable mortality due to *Candida* infections that ranges between 42% and 63%.

The earlier that antifungal therapy is started, the more likely it is to keep the patient alive, but waiting for culture positivity and fungi identification before starting a targeted antifungal therapy can take a long time. Instead, alternative strategies for patients without proven microbiological evidence of fungal infections might be adopted. These strategies are globally defined as untargeted antifungal treatments and encompass prophylaxis, pre-emptive and empiric treatment. This review examines these strategies and was originally published in 2008, with this update appearing in 2016.

The review sought all randomized trials that evaluated the effect of any antifungal agents, either systemic or non-absorbable, alone or in combination with other interventions, given as untargeted treatment. It considered trials in both adults and children who were classified as critically ill, such as those admitted to an ICU or having recently undergone an abdominal or other major surgical procedure. New born babies, and patients with neutropenia, HIV or a transplant were excluded.

### Listen to the Podcast



 [View the transcript](#)



Podcasts from **The Cochrane Library** 

### Multiple Choice Questions

[Test your knowledge of this Cochrane review](#)

### Presentations



Download slides describing the essential components of the paper.

[Clinical vignette](#)

# Special Collections

Special Collections bring together selected Cochrane Reviews and other external sources to provide a useful evidence overview on an important healthcare topic. Some Special Collections are created in conjunction with Evidence Aid, aiming to provide resources for decision-makers involved with disasters and humanitarian emergencies.

# Special Collections

- Special Collections
- توسط تیم کاکرین ایجاد می شود بدین ترتیب که تعدادی از Review های مربوط به یک موضوع خاص رو که به یک مشکل عمده در زمینه بهداشت و سلامت مربوط می شود را یکجا و در کنار هم می آورد. این review ها ممکن است از Cochrane Review Groups مختلف باشند و یا با همکاری [Evidence Aid](#) ( از همکاری کمیته بین المللی نجات آمریکا و Cochrane پس از سونامی اقیانوس هند به وجود آمد. مطالعات سیستماتیک انجام شده عمدتاً مربوط به بلایای طبیعی بوده و بحران های انسانی یا شرایط اضطراری عمده بهداشت و درمان را بررسی می کند)
- مثلاً در Special Collections با عنوان Neglected tropical diseases: the top five
- پنج بیماری فراموش شده نواحی گرمسیری گروه های زیر همکاری داشته اند:
- Cochrane Reviews are an important independent analysis of research relevant to disease control in NTDs. This Special Collection brings together reviews from Cochrane Review Groups including [Cochrane Infectious Diseases](#), [Cochrane Eyes and Vision](#), and [Cochrane Skin](#);
- مقالات review که در SC ارائه می شوند به صورت Free هستند.

## Cochrane Clinical answer

**Cochrane Library** is a collection of six databases that contain different types of high-quality, independent evidence to inform healthcare decision-making, and a seventh database that provides information about groups in the Cochrane Collaboration.

**Cochrane Clinical Answers** is a derivative product of Cochrane Library. The product aims to provide a readable, digestible entry point to the high-quality research from Cochrane systematic reviews to inform your decision making at the point of care. They are presented in a question and answer format.



## A Good Reference

- Cochrane Handbook for Systematic Reviews of Interventions



- Available at: <http://handbook.cochrane.org/>
- <http://www.cochranelibrary.com/help/how-to-use-cochrane-library.html>
- <http://training.cochrane.org/handbook>



- **Information for authors**
- View [How to prepare a Cochrane Review](#) for further information, including author resources and training information.
- <http://www.cochranelibrary.com/help/how-to-prepare-a-cochrane-review.html>

<http://training.cochrane.org/handbooks>



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### Guides and handbooks

Cochrane Handbook for Systematic Reviews of Interventions

Cochrane Handbook for Systematic Reviews of Diagnostic Test Accuracy



Cochrane Methods  
Learning and Diagnostic T

GRADE Handbook



Cochrane Style Guide



Cochrane Information Specialists' Handbook



Cochrane Standards for conduct and reporting of new reviews of interventions



Cochrane Methods

# **worked example of a search strategy**

## For Example

*What is the effectiveness of hypnotherapy versus nicotine replacement therapy for helping people to give up smoking?*

*What is the effectiveness of hypnotherapy versus nicotine replacement therapy for helping people to give up smoking?*

- **P (population or problem) = smokers/smoking**
- **I (intervention) = hypnotherapy/hypnosis**
- **C (comparison) = nicotine replacement therapy/NRT**
- **O (outcome) = giving up smoking/smoking cessation**



MeSH

- 1- Smoking
- 2- smoking cessation
- 3- tobacco use disorders/ therapy
- 4- tobacco use cessation
- 5- giv\* up smoking
- 6- quie\* smoking
- 7- smoking cessation
- 8- giv\* up tobacco
- 9- quit\* tobacco



10- tobacco use cessation

11- tobacco cessation

**MeSH** 12- hypnosis

13- hypnosis

14- hypnotherap\*

**MeSH** 15- nicotine/administration & dosage---therapeutic use

16- nicotine therap\*

17- nicotine replacement



18- NRT

19- nicotine agonist\*

20- nicotine patch\*


21- #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or  
#10 or #11

22- #12 or #13 or #14

23- #15 or #16 or #17 or #18 or #19 or #20

24- #21 and #22 and #23

Wiley Online Library

 **Cochrane Library** Trusted evidence. Informed decisions. Better health.

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Search   Search Manager   **Medical Terms (MeSH)**   Browse

[Search Limits](#)   [Search Help](#)   (Word variations have been searched)   [Add to Search Manager](#)

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[Add to top](#)

[View fewer lines](#)

		#1	MeSH descriptor: [Smoking] explode all trees		5783	
		#2	MeSH descriptor: [Smoking Cessation] explode all trees		3440	
		#3	MeSH descriptor: [Tobacco Use Disorder] explode all trees and with qualifier(s): [Therapy - TH]		290	
		#4	MeSH descriptor: [Tobacco Use Cessation] explode all trees		3508	
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	<b>Edit</b>		#6	<input type="text" value="quit* smoking"/>		3057
	<b>Edit</b>		#7	<input type="text" value="smoking cessation"/>		6810
	<b>Edit</b>		#8	<input type="text" value="giv* up tobacco"/>		776
	<b>Edit</b>		#9	<input type="text" value="quit* tobacco"/>		2637
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	<b>Edit</b>		#11	<input type="text" value="tobacco cessation"/>		5581



[-]	<b>Edit</b>	[+]	#11	tobacco cessation	[m]	5581
[-]		[+]	#12	MeSH descriptor: [Hypnosis] explode all trees	[m]	631
[-]	<b>Edit</b>	[+]	#13	hypnosis	[m]	1248
[-]	<b>Edit</b>	[+]	#14	hypnotherap*	[m]	290
[-]		[+]	#15	MeSH descriptor: [Nicotine] explode all trees and with qualifier(s): [Administration & dosage - AD, Therapeutic use - TU]	[m]	1165
[-]	<b>Edit</b>	[+]	#16	nicotine <u>therap</u> *	[m]	2335
[-]	<b>Edit</b>	[+]	#17	nicotine replacement	[m]	-
[-]	<b>Edit</b>	[+]	#18	<u>NRT</u>	[m]	-
[-]	<b>Edit</b>	[+]	#19	nicotine agonist*	[m]	677
[-]	<b>Edit</b>	[+]	#20	nicotine patch*	[m]	1014
[-]	<b>Edit</b>	[+]	#21	#1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11	[m]	-



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[Search Help](#)  Highlight orphan lines

Save existing strategy

Strategy Name

Comments



# THE END!

Thanks for your  
attention.

# What is a Cochrane Review?

Cochrane Reviews are systematic reviews of research in healthcare and health policy that are published in the *Cochrane Database of Systematic Reviews*. There are five types of Cochrane Review:

- **Intervention reviews** assess the benefits and harms of interventions used in healthcare and health policy.
- **Diagnostic test accuracy reviews** assess how well a diagnostic test performs in diagnosing and detecting a particular disease. [SEP]
- **Methodology reviews** address issues relevant to how systematic reviews and clinical trials are conducted and reported.
- **Qualitative reviews** synthesize qualitative evidence to address questions on aspects other than effectiveness.
- **Prognosis reviews** address the probable course or future outcome(s) of people with a health problem.