

EBM



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Motivation: EBM “Successes”

- Theophylline and asthma
 - We were doing the wrong thing
 - Littenberg, 1988
- Beta blockers and MIs
 - We weren't doing the right thing
 - Yusuf, 1987

Uses of “EBM”

- Use of empirically-verified treatments in the care of patients
- Incorporation of research results into the process of care
- Ability to critically appraise research results

What is Evidence-Based Medicine?

- “The integration of individual clinical expertise with the best available clinical evidence from systematic research.”
 - David L Sackett, W Scott Richardson, William Rosenberg, R Brian Haynes *Evidence Based Medicine-- How to Practice and Teach EBM*, 1996
 - [Various definitions](#)

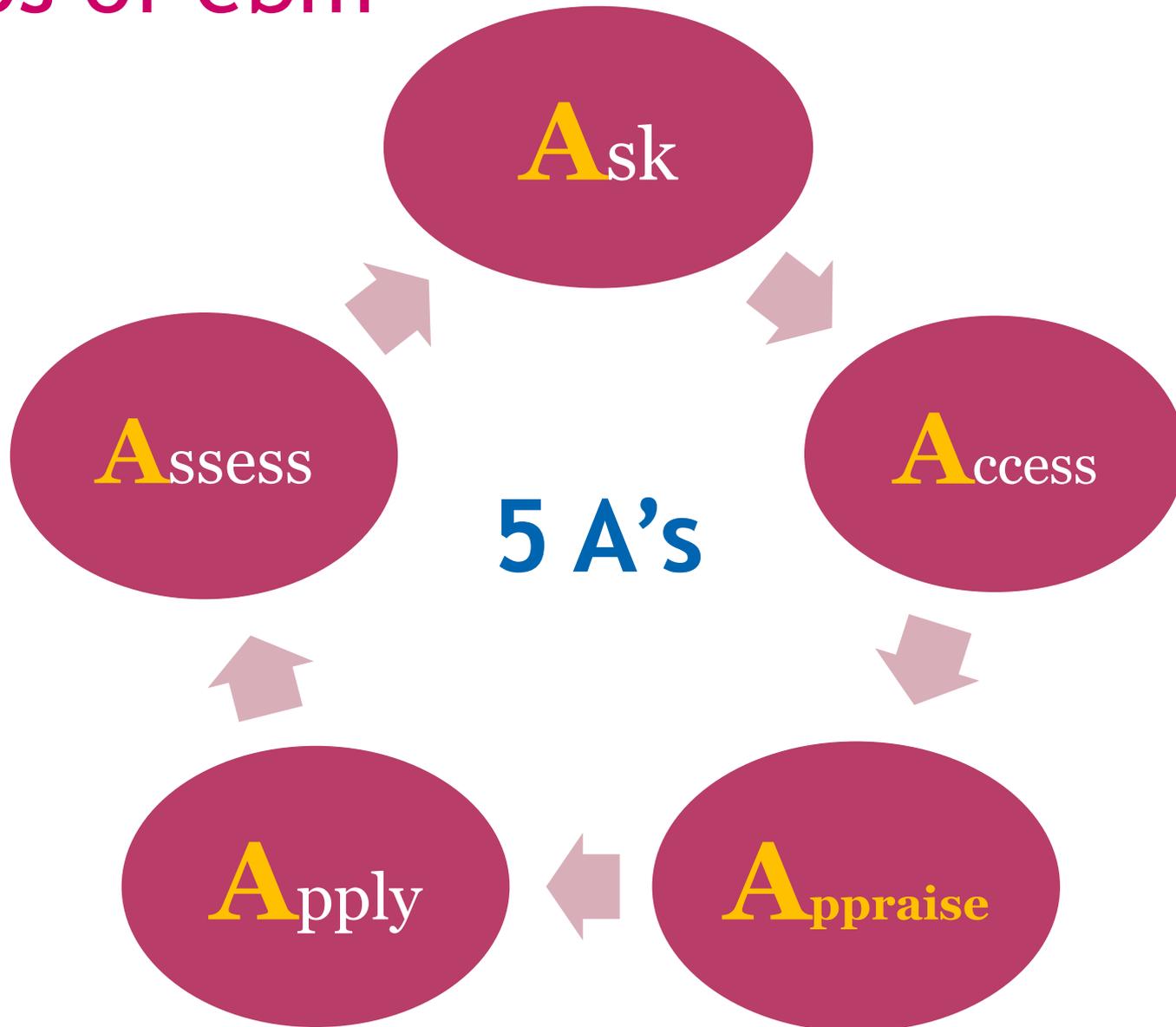
Individual
Clinical
Expertise



Patient's
Values and
Expectations

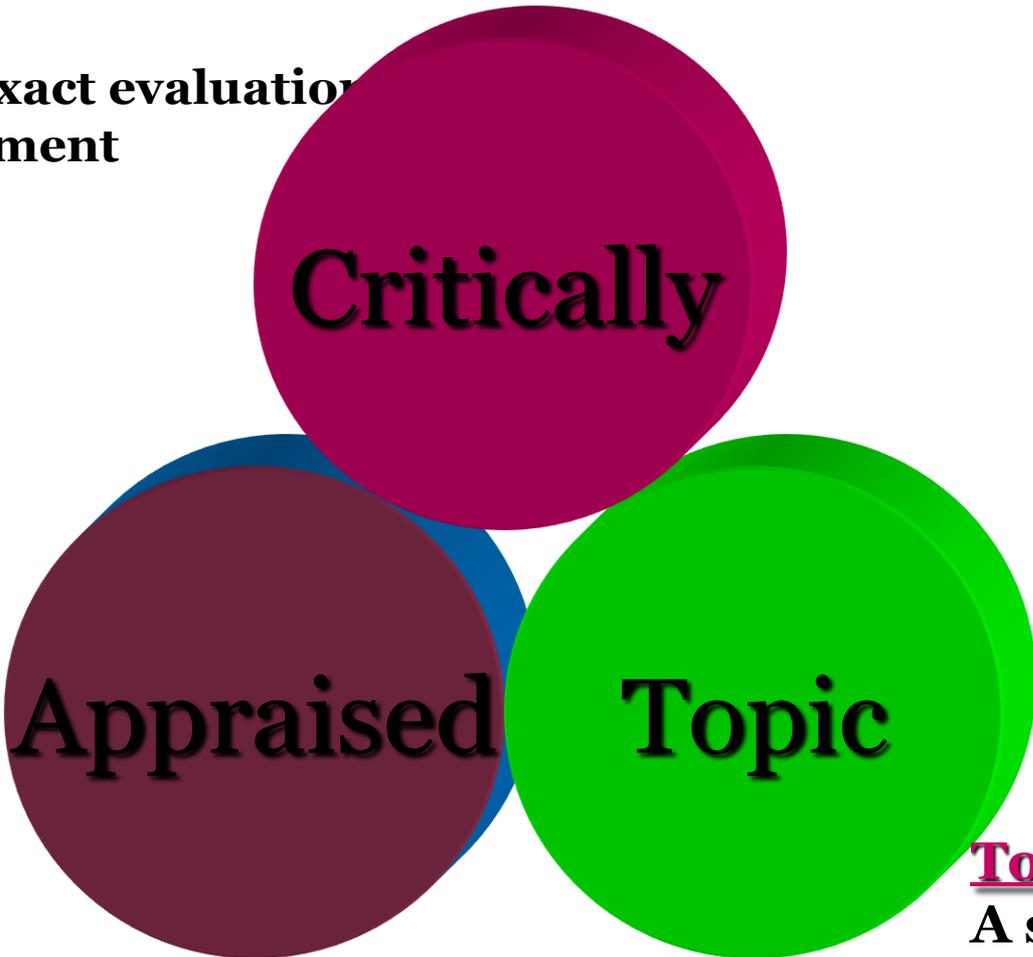
Best Available Clinical Evidence

Steps of ebm



Critical:

careful, exact evaluation
and judgment



Critically

Appraise:

To evaluate, &
estimate the
quality, amount
of validity,
results and
applicability

Appraised

Topic

Topic:

A subject of
discussion or
conversation

“Best Available Clinical Evidence”

- **Therapy**
 - Double-blind, placebo-controlled, randomized clinical trial
- **Diagnosis**
 - Independent, blind comparison with a reference standard
- **Prognosis**
 - Representative and well-defined prospective cohort of patients at a similar point in the course of disease
- See [Centre for Health Evidence](#)

Levels of Evidences

- (I-1) a well done systematic review of 2 or more RCTs
- (I-2) a RCT
- (II-1) a cohort study
- (II-2) a case-control study
- (II-3) a dramatic uncontrolled experiment
- (III) respected authorities, expert committees, etc..
- (IV) ...someone once told me....
 - <http://www.phru.org/casp/>
 - See also [AAFP](#)

“Systematic Research”

- “Meta-analysis”
- “Literature synthesis”
 - From Michael Scriven

Questions

Critical appraisal skills

Does it work? OR Is it effective?

Question types predominate



But there are others:

- Equitable?
- Efficient?
- Appropriate?
- Accessible?
- Responsive? OR
- How does it work? OR
- Diagnosis/prognosis?

ARIF

Aggressive Research Intelligence Facility

"Advancing the use of evidence on the effects of health care in the West Midlands"

ARIF

ARIF

University of Birmingham

ACKNOWLEDGEMENT:

This slide series is based on a format originally designed by CASP

Questions: PICO

	1	2	3	4
	Patient or Problem	Intervention (a cause, prognostic factor, treatment, etc)	Comparison Intervention (if necessary)	Outcomes
Tips for Building	Starting with your patient, ask "How would I describe a group of patients similar to mine?" Balance precision with brevity.	Ask "Which main intervention am I considering?" Be specific	Ask "What is the main alternative to compare with the intervention?" Again, be specific	Ask "What can I hope to accomplish?", or "What could this exposure really affect?" Again, be specific
Example	"In patients with heart failure from dilated cardiomyopathy who are in sinus rhythm..."	"...would adding anticoagulation with warfarin to standard heart failure therapy..."	"...when compared with standard therapy alone..."	"...lead to lower mortality or morbidity from thromboembolism. Is this enough to be worth the increased risk of bleeding?"

USEFULNESS OF MEDICAL INFORMATION

**DISEASE ORIENTED EVIDENCE THAT MATTERS
(DOES)**

**PATIENT ORIENTED EVIDENCE THAT MATTERS
(POEMS)**

DOEs POEM

Drug A lowers cholesterol	Drug A decreases cardiovascular mortality/morbidity	Decreases overall mortality
PSA screening detects prostate cancer most of the time and at an early stage	PSA screening decreases mortality	PSA screening improves quality of life
Corticosteroid use decreases neutrophil chemotaxis in patients with asthma	Corticosteroid use decreases admissions, length of hospital stay, and symptoms of acute asthma	Corticosteroid use decreases asthma-related mortality
Tight control of type 1 diabetes mellitus can keep fasting blood glucose <140mg/dl	Tight control of type 1 diabetes can decrease microvascular complications	Tight control of type 1 diabetes can decrease mortality and improve quality of life

Problems

- Should a 30-year-old woman with recurrent uncomplicated lower UTIs be advised to drink cranberry juice to prevent reinfection?
- For a 63 year old woman with Type 2 diabetes, is gabapentin superior to amitriptyline as first-line therapy for painful peripheral neuropathy?



Educational Prescription

Patient's Name

Learner:

3-part Clinical Question

Target Disorder:

Intervention (+/- comparison):

Outcome:

Date and place to be filled:

Presentation will cover:

- Relevancy
- PICO
- search strategy
- search results
- the validity of this evidence
- the importance of this valid evidence
- can this valid, important evidence be applied to your patient

Task

- Well formulated question?
- Formulate the query
- Report back to us on your success
- The whole group reports back in a week

Search for the Best Evidence

- ~~Review articles~~
- Community/professional standards
- Systematic reviews
- Original results

What are the Sources of Good Evidence?

The Johns Hopkins Medical Institutions
Welch WEB
 The William H. Welch Medical Library

→ MyWelch → Home → PubMed → JHULibraries Catalog → RAUL (Rem

QuickLinks

Choose...
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 Basic Science
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 Consumer Health -->
Evidence Based Medicine
 General Reference -->
 Grants & Funding
 Government Resources
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 PDA Resources
 Public Health
 Writing & Publishing
 More...

Evidence Based Medicine

- [Systematic Reviews, Journal Articles and other Databases](#)
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- [Organizations and other resources](#)

Ranking * = Good; **Very Good; ***Excellent

Systematic Reviews, Journal Articles and other Databases

- [National Guideline Clearinghouse](#)*** - EBM practice guidelines
- [Cochrane](#)*** - Systematic reviews of literature on specific subjects
- [TRIP-CeRes](#)*** - British meta-search engine; covers 58 resources
- [Clinical Queries - PubMed](#)*** - Evidence Based filters for Medline
- [UpToDate](#)*** - Topic reviews on specific clinical issues
- [MD Consult](#) - Practice guidelines, clinical topics
- [Clinical Evidence Online](#)** - Provides a searchable list of reviewed topics, BMJ
- [Best Evidence](#) - Provides a searchable list of reviewed topics, ACP
- [CAT Bank](#)* - 63 Critically Appraised Topics
- [SUM Search - Univ. of Texas](#) - Meta-search for Merck, NGC, and PubMed
- [Bandolier](#) - Reviewed literature, offers subjects by medical speciality

www.welch.jhu.edu

- [National Guideline Clearinghouse](#)^{***} -
- [Cochrane](#)^{***} - Systematic reviews of literature
- [TRIP - CeRes](#)^{***} - British meta-search engine
- [Clinical Queries - PubMed](#)^{***} - Evidence-based medicine
- [UpToDate](#)^{***} - Topic reviews on specific clinical questions
- [MD Consult](#) - Practice guidelines, clinical decision support
- [Clinical Evidence Online](#)^{**} - Provides a searchable database of evidence-based medicine
- [Best Evidence](#) - Provides a searchable database of evidence-based medicine
- [CAT Bank](#)^{*} - 63 Critically Appraised Topics
- [SUM Search - Univ. of Texas](#) - Meta-search engine
- [Bandolier](#) - Reviewed literature, offers search filters

<http://library.ksu.edu.sa/en/>

HOME

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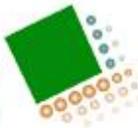
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Together with the Rector Prof. Dr. Abdullah Al-Othman, and the Vice President Dr. Ali Al-Ghamdi visited His Excellency the Minister of Culture and Information ...

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planning and



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Vission, Mission, Values and Objectives

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كلية التربية	كلية علوم الأغذية والزراعة
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الترحيب

Libraries & Cultural Resources combines the expertise and services of many of the University's information providers to assure provision of full access to the best information in a variety of formats and media. The Libraries and Cultural Resources family includes Archives and Special Collections, University Libraries and University Press. Libraries and Cultural Resources seeks to fully align its information services with the teaching, learning, research, service and administration needs of the University. We are evolving a family of collaborative services that seeks single points of service, both electronic and physical, for our communities. This approach places the emphasis on the needs of our diverse users rather than on sustaining organizational boundaries.

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Saudi Digital Library



[Saudi Digital Library](#) is one of the pioneer projects of NCEL aiming at enhancing the education process in the Kingdom of Saudi Arabia.

The project objective is to support the learning and educational aspects in general and e-learning and distance learning particularly. It is also aims at covering the requirements of scientific research as well as empowering competency and building a knowledge society.

E-learning service is one of the main objectives of the digital library as it supports the digital curricula with sources and resources important to both learner and teacher. The service also improves and expands the awareness levels and facilitates sharing of information.

The library contains approx. 90,000 titles of digital books and resources from leading publishing houses...all are available for university student and faculty staff.

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- Jazan University
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- King Fahd University of Petroleum and Minerals (kfupm)
- King Faisal University
- King Khalid University
- King Saud University
- Najran University
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- Northern Borders University
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- Shaqra University
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- Taif University
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- University Of Tabuk

باللغة العربية

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- + Computer Science & Engineering
- + Dentistry
- + Earth Sciences
- + Economics, Econometrics & Finance
- + Education
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- + General Reference Works & Information Resources



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By accessing the digital library our professors, researchers and students have access to:

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Federated Search

on all Digital Library Resources

Browse by Subject

- Biological Science
- Environmental Sciences
- Medicine

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- [MD Consult](#) - Practice guidelines, clinical decision support
- [Clinical Evidence Online](#)** - Provides a searchable database of clinical evidence
- [Best Evidence](#) - Provides a searchable database of clinical evidence
- [CAT Bank](#)* - 63 Critically Appraised Topics
- [SUM Search](#) - Univ. of Texas - Meta-search engine
- [Bandolier](#) - Review of randomised controlled trials

National Guideline Clearinghouse

Website

National Guideline Clearinghouse

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In Memoriam
Tribute to John M. Eisenberg, M.D., 1946-2002

Search NGC: 10 results [Search Help](#) [Detailed Search](#)

Browse NGC: [Disease/Condition](#) [Treatment/Intervention](#) [Organization](#)

Guideline Comparison: [View Guideline Collection](#) [Guideline Syntheses](#)

Wednesday, March 20, 2002

Welcome! You are connected to the **National Guideline Clearinghouse™ (NGC)**, a public resource for evidence-based clinical practice guidelines. NGC is sponsored by the [Agency for Healthcare Research and Quality](#) (formerly the Agency for Health Care Policy and Research) in partnership with the [American Medical Association](#) and the [American Association of Health Plans](#). Click on [About NGC](#) to learn more about us.

www.guideline.gov

(1/37)

[Preventive health care, 2000 update. Use of ambulatory electrocardiography for the detection of paroxysmal atrial fibrillation in patients with stroke.](#) Canadian Task Force on Preventive Health Care. 2000. 7 pages.

(2/37)

[Antithrombotic therapy in atrial fibrillation. In: Sixth ACCP Consensus Conference on Antithrombotic Therapy.](#) American College of Chest Physicians. 2001 Jan. 13 pages.

(3/37)

[AAACE clinical practice guidelines for the evaluation and treatment of hyperthyroidism and hypothyroidism.](#) American Association of Clinical Endocrinologists/American College of Endocrinology. 1996. 24 pages.

(4/37)

[Driving and heart disease.](#) European Society of Cardiology. 1998 Aug. 13 pages.

(5/37)

[Atrial fibrillation: drug treatment and DC electroversion.](#) Finnish Medical Society Duodecim. 2001 Apr 30. Various pagings.

(6/37)

[Screening for thyroid disease.](#) American College of Physicians-American Society of Internal Medicine. 1997 Mar 6. 3 pages (guideline); 14 pages (background paper).

Restoration of sinus rhythm

- Measures to convert **atrial fibrillation** to sinus rhythm should be undertaken if sinus rhythm does not restore after decrease of heart rate and correction of possible heart failure **[B]**.
- Direct current electroversion is recommended if the patient:
 - Has used several antiarrhythmic drugs
 - Is hypotensive
 - Is in a critical condition because of the arrhythmia
 - Has chronic **atrial fibrillation**
- Drugs used in this indication include flecainide and propafenone; previously, quinidine 0.2 grams 3 times at 2-hour intervals was often used. Monitoring the patient during conversion of the rhythm, and for at least 3 hours after that, is recommended because of the risk of ventricular tachycardia.

Definitions:

Levels of Evidence

A: Strong research-based evidence. Multiple relevant, high-quality scientific studies with homogenic results.

B: Moderate research-based evidence. At least one relevant, high-quality study or multiple adequate studies.

C: Limited research-based evidence. At least one adequate scientific study.

D: No scientific evidence. Expert panel evaluation of other information.

National Guideline Clearinghouse*** -

- [Cochrane***](#) - Systematic reviews of literature
- [TRIP - CeRes***](#) - British meta-search engine
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- [Best Evidence](#) - Provides a searchable database of clinical evidence
- [CAT Bank*](#) - 63 Critically Appraised Topics
- [SUM Search - Univ. of Texas](#) - Meta-search engine
- [Bandolier](#) - Reviewed literature, offers a searchable database

Cochrane

Website

The screenshot shows the Cochrane website's search interface. At the top, there are navigation links: CLEAR, TOPICS, RECORDS, MeSH, HISTORY, and HELP. Below these is a search bar with the text "atrial fibrillation" and a "Go" button. A "Refine your search" dropdown menu is also visible. The search results are displayed in a list with checkboxes and the following items:

- The Cochrane Database of Systematic Reviews (2935 out of 2935)
- Database of Abstracts of Reviews of Effects (4006 out of 4006)
- The Cochrane Central Register of Controlled Trials (CENTRAL) (362540 out of 362540)
- The Cochrane Database of Methodology Reviews (16 out of 16)
- The Cochrane Methodology Register (CMR) (4553 out of 4553)
- About the Cochrane Collaboration (84 out of 84)
- Health technology assessment database (HTA) (3138 out of 3138)
- NHS Economic evaluation database (NHS EED) (11485 out of 11485)

On the left side of the screenshot, there is a sidebar with navigation links: Home | Support | Links. Below this, there is a section for "The Cochrane Library" with links for About, Log on, What's in, Abstracts of Cochrane Reviews, and Subscribe. There is also a section for "La Cochrane Library Plus en español".

Search phrase:

atrial fibrillation

Go

Refine your search ↓

(atrial next fibrillation) - 1457 hits

View selected • Unselect all • Save selected

Refine your search ↓

(atrial next fibrillation) - 1457 hits

View selected • Unselect all • Save selected

The Cochrane Database of Systematic Reviews
(47 out of 2935)

Complete reviews (33 out of 1669)

documents 1 to 20 of 33



- [1. Anticoagulants for acute ischaemic stroke.](#)
- 2. Anticoagulants for preventing recurrence following presumed non-cardioembolic ischaemic stroke or transient ischaemic attack.
- 3. Anticoagulants for preventing stroke in patients with nonrheumatic atrial fibrillation and a history of stroke or transient ischemic attacks.
- 4. Anticoagulants or antiplatelet therapy

[Send a comment about this review](#)

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ANTICOAGULANTS FOR ACUTE ISCHAEMIC STROKE

Gubitz G, Counsell C, Sandercock P, Signorini D



Date of most recent substantive amendment: 22 February 1999

This review should be cited as: Gubitz G, Counsell C, Sandercock P, Signorini D. Anticoagulants for acute ischaemic stroke (Cochrane Review). In: *The Cochrane Library*, Issue 2, 2003. Oxford: Update Software.

ABSTRACT

Background

Most ischaemic strokes are caused by blood clots blocking an artery in the brain. Clot prevention with anticoagulant therapy could have a significant impact on patient survival, disability and recurrence of stroke.

Objectives

The objective of this review was to assess the effect of anticoagulant therapy in the early treatment of

Anticoagulants or antiplatelet therapy for non-rheumatic atrial fibrillation and flutter

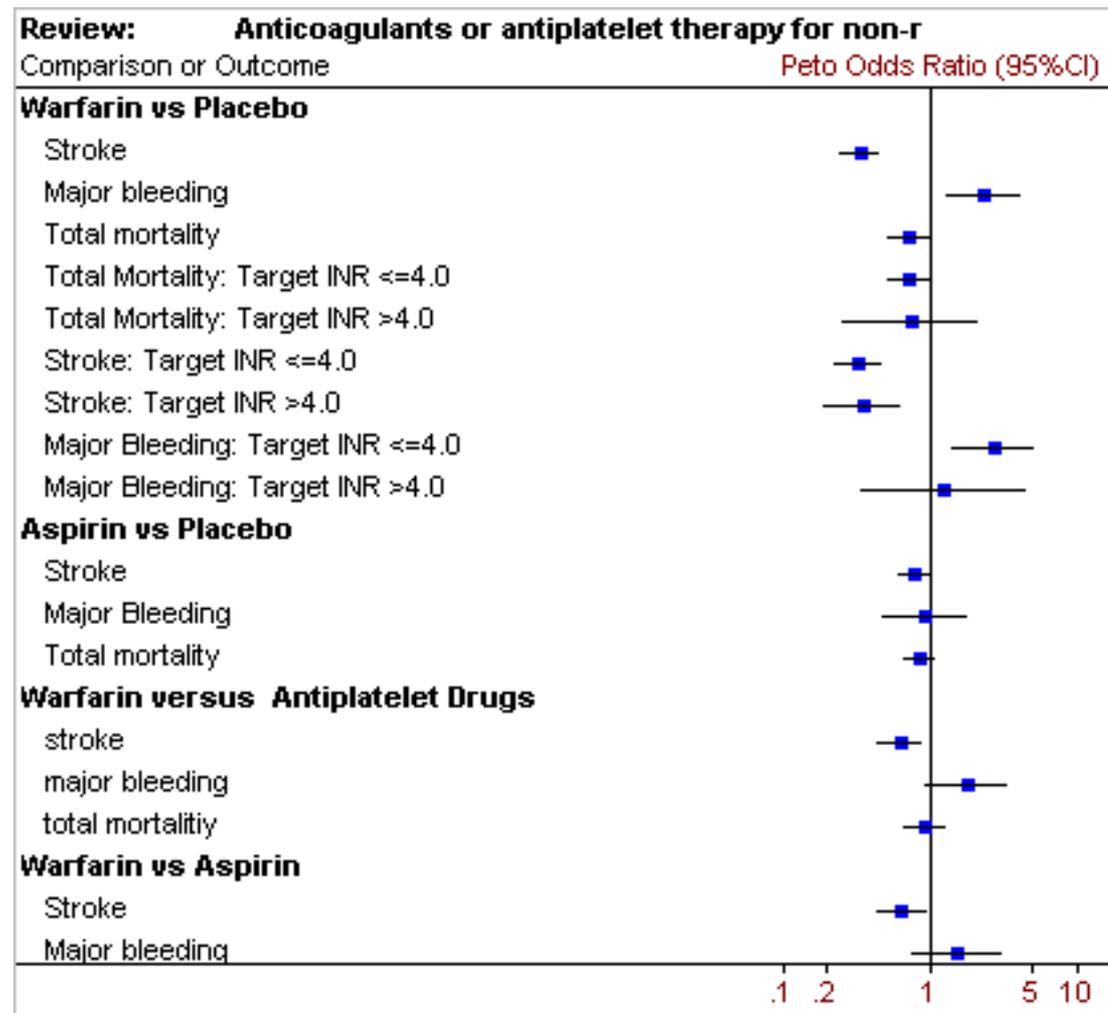
Segal JB, McNamara RL, Miller MR, Powe NR, Goodman SN, Robinson KA, Bass EB

Main results: Fourteen articles were included in this review. Warfarin was more efficacious than placebo for primary stroke prevention {aggregate odds ratio (OR) of stroke=0.30 [95% Confidence Interval (C.I.) 0.19,0.48]}, with moderate evidence of more major bleeding { OR= 1.90 [95% C.I. 0.89,4.04]}. Aspirin was inconclusively more efficacious than placebo for stroke prevention {OR=0.68 [95% C.I. 0.29,1.57]}, with inconclusive evidence regarding more major bleeds {OR=0.81[95% C.I. 0.37,1.78]}. For primary prevention, assuming a baseline risk of 45 strokes per 1000 patient-years, warfarin could prevent 30 strokes at the expense of only 6 additional major bleeds. Aspirin could prevent 17 strokes, without increasing major hemorrhage. In direct comparison, there was moderate evidence for fewer strokes among patients on warfarin than on aspirin {aggregate OR=0.64[95% C.I. 0.43,0.96]}, with only suggestive evidence for more major hemorrhage {OR =1.58 [95% C.I. 0.76,3.27]}. However, in younger patients, with a mean age of 65 years, the absolute reduction in stroke rate with warfarin compared to aspirin was low (5.5 per 1000 person-years) compared to an older group (15 per 1000 person-years). Low-dose warfarin or low-dose warfarin with aspirin was less efficacious for stroke prevention than adjusted-dose warfarin.

Reviewers' conclusions: The evidence strongly supports warfarin in AF for patients at average or greater risk of stroke, although clearly there is a risk of hemorrhage. Although not definitively supported by the evidence, aspirin may prove to be useful for stroke prevention in sub-groups with a low risk of stroke, with less risk of hemorrhage than with warfarin. Further studies are needed of low- molecular weight heparin and aspirin in lower risk patients.

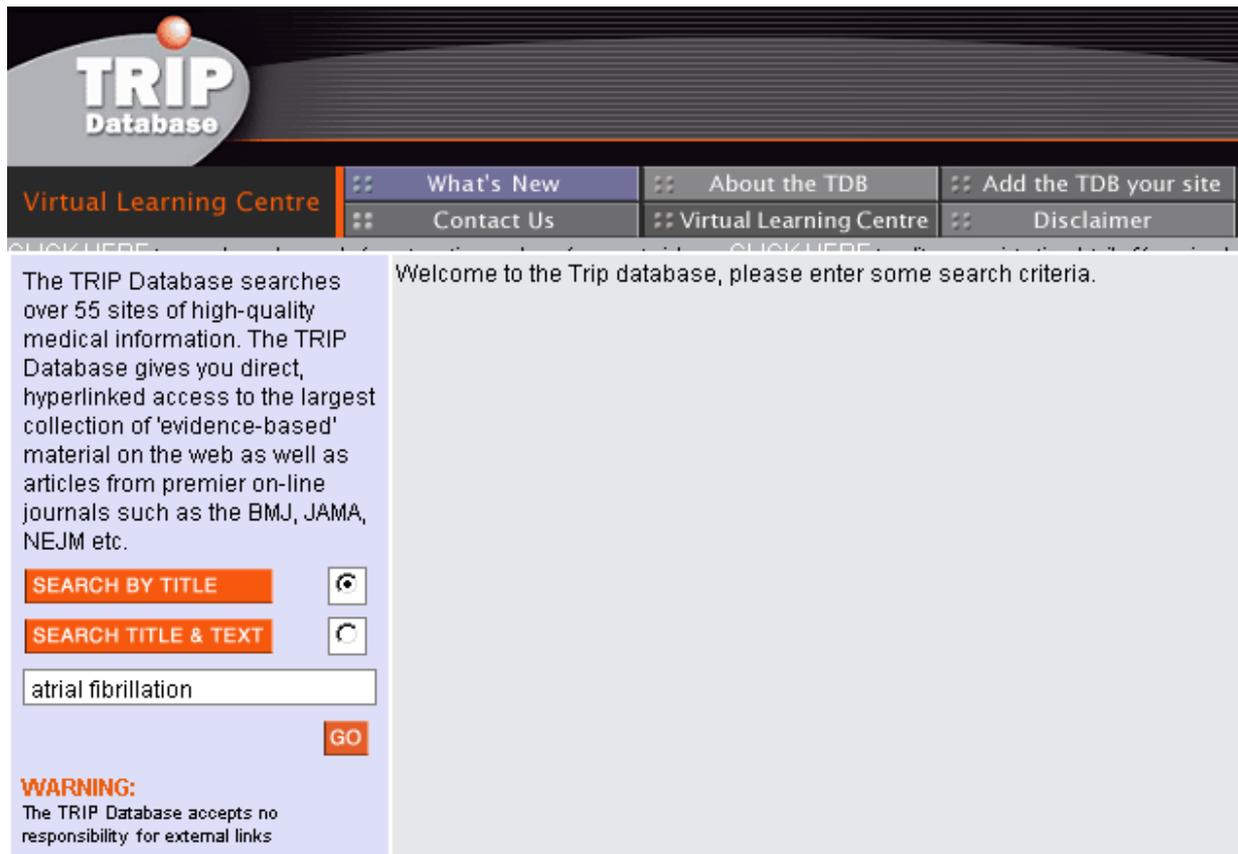
Tables & Graphs

- [MetaView graphs](#)



TRIP Database

Website



The screenshot displays the TRIP Database website. At the top left is the TRIP Database logo. A navigation menu includes links for 'Virtual Learning Centre', 'What's New', 'About the TDB', 'Add the TDB your site', 'Contact Us', 'Virtual Learning Centre', and 'Disclaimer'. The main content area is split into two columns. The left column contains a description of the database and search options: 'SEARCH BY TITLE' (selected), 'SEARCH TITLE & TEXT', a search input field containing 'atrial fibrillation', and a 'GO' button. A 'WARNING' section states: 'The TRIP Database accepts no responsibility for external links'. The right column displays the search results, starting with 'Welcome to the Trip database, please enter some search criteria.' and showing '(75 resources...)'.

(75 resources...)

www.tripdatabase.com

Search RESULTS:

You searched on **atrial fibrillation**

Total records matched > 79 of 24709

Evidence-Based (Direct links)	Records Matched: 43
Query-answering services	Records Matched: 0
Peer-reviewed journal	Records Matched: 29
Guidelines	Records Matched: 3
eTextbooks	Records Matched: 4
Experimental links to Clinical Queries on PubMed.	

REPEAT SEARCH FOR: **atrial fibrillation** using title and text

Search within these results

Search by: TITLE ONLY Search by: TITLE & TEXT

New Search

Search by: TITLE ONLY Search by: TITLE & TEXT

Evidence-Based (Direct links) The links under this section come from 'Evidence based sources', i.e. they have been pre-critically appraised using a pre-defined method. Most sites have been recommended from the 'Netting the Evidence' site. (<http://www.shef.ac.uk/~scharr/ir/netting.html>)

Initial energy for elective external cardioversion of persistent atrial fibrillation ACP Journal Club	2001
Comparing digoxin with amiodarone and sotalol for converting new onset atrial fibrillation POEMs	2001
Prevalence of atrial fibrillation (AF) Bandolier	2001
Amiodarone as a first-choice drug for restoring sinus rhythm in patients with atrial fibrillation . A randomized,	2004

Query-answering services The sources used in this section specifically respond to clinical queries received from practitioners/purchasers. The query-answering process is not uniform and the quality may vary. You are strongly advised to familiarise yourself with the strengths and weaknesses of each sources approach.

Peer-reviewed journal The links in this section are from peer-reviewed journals. As such they have not undergone a systematic critical appraisal.

Warfarin Therapy for an Octogenarian Who Has atrial fibrillation Annals of Internal Medicine	2001
Incident Thromboembolism in the Aorta and the Renal, Mesenteric, Pelvic, and Extremity Arteries After Discharge From the Hospital With a Diagnosis of atrial fibrillation Archives of Internal Medicine	2001
Systematic review of long term anticoagulation or antiplatelet treatment in patients with non-rheumatic atrial

Guidelines The links in this section are taken from sites whose main remit is the production of guidelines. NOTE: Other guidelines may appear in other sections.

Preventive health care, 2000 update. Use of ambulatory electrocardiography for the detection of paroxysmal atrial fibrillation in patients with stroke. National Guideline Clearinghouse	2001
atrial fibrillation PRODIGY	2001
atrial fibrillation : current knowledge and recommendations for management European Society for Cardiology	1998

eTextbooks The links in this section originate predominantly from eTextbooks and similar sources - as with other textbooks they may not be regularly updated.

atrial fibrillation eMedicine.com	2000
Sustained atrial fibrillation Medscape (13th Edition)	1999

Experimental links to Clinical Queries on Pubmed. These will return a number of hits - some of which will be inappropriate. To refine your search further find at least one article that matches your query and use the related article function to improve your search.

Therapy emphasis

Diagnosis emphasis

Etiology emphasis

Prognosis emphasis

- [National Guideline Clearinghouse](#)*** -
- [Cochrane](#)*** - Systematic reviews of literature
- [TRIP - CeRes](#)*** - British meta-search engine
- [Clinical Queries - PubMed](#)*** - Evidence-based medicine
- [UpToDate](#)*** - Topic reviews on specific clinical topics
- [MD Consult](#) - Practice guidelines, clinical decision support
- [Clinical Evidence Online](#)** - Provides a searchable database of clinical evidence
- [Best Evidence](#) - Provides a searchable database of clinical evidence
- [CAT Bank](#)* - 63 Critically Appraised Topics
- [SUM Search - Univ. of Texas](#) - Meta-search engine
- [Bandolier](#) - Reviewed literature, offers search filters

UpToDate

[Website](#)



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[Table of Contents](#)

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135 titles matching: **Atrial fibrillation**

Most Relevant Topics (30 titles)

- [Causes of atrial fibrillation](#)
- [Overview of the presentation and management of atrial fibrillation](#)
- [Paroxysmal atrial fibrillation](#)
- [Antiarrhythmic drugs to maintain sinus rhythm after cardioversion in atrial fibrillation: Clinical trials](#)
- [Antiarrhythmic drugs to maintain sinus rhythm after cardioversion in atrial fibrillation: Recommendations](#)
- [Anticoagulation during restoration of sinus rhythm in atrial fibrillation](#)
- [Anticoagulation to prevent embolization in chronic atrial fibrillation: Clinical trials](#)
- [Anticoagulation to prevent embolization in chronic atrial fibrillation: Recommendations](#)
- [Arrhythmic after cardiac surgery: Atrial fibrillation and atrial flutter](#)

Antiarrhythmic drugs to maintain sinus rhythm after cardioversion in atrial fibrillation: Recommendations

- ▶ [GENERAL PRINCIPLES](#)
- ▶ [RECOMMENDATIONS](#)
 - [Lone atrial fibrillation](#)
 - [AF associated with structural heart disease](#)
 - [Drug-refractory AF](#)
- ▶ [REFERENCES](#)

GRAPHICS

- ▶ [ACC/AHA/ESC drugs maintain NSR](#)
- ▶ [ACC/AHA pharm Rx paroxysmal AF](#)
- ▶ [ACC/AHA drugs perm persist AF](#)
- ▶ [ACC/AHA drugs maintain NSR AF](#)
- ▶ [Drug doses maintain NSR](#)
- ▶ [Types of proarrhythmia AADs](#)
- ▶ [Quinidine in AF](#)
- ▶ [ACC/AHA oral drug HR control AF](#)
- ▶ [Proarrhythmia in CAST](#)

RELATED TOPICS

- ▶ [Restoration of sinus rhythm in atrial fibrillation: Recommendations](#)
- ▶ [Antiarrhythmic drugs to maintain sinus rhythm after cardioversion](#)

Antiarrhythmic drugs to maintain sinus rhythm after cardioversion in atrial fibrillation: Recommendations

[Morton F Arnsdorf, MD](#)

UpToDate performs a continuous review of over 270 journals and other resources. Updates are added as important new information is published. The literature review for version 10.1 is current through December 2001; this topic was last changed on November 9, 2001. The next version of UpToDate (10.2) will be released in June 2002.

GENERAL PRINCIPLES — DC shock and antiarrhythmic drugs are usually effective in converting atrial fibrillation (AF) to a sinus mechanism, thereby improving symptoms, lessening the liability for the development of a tachycardia-induced cardiomyopathy involving the ventricles and atria, and minimizing the long-term risk of peripheral and cerebral emboli. ([See "Restoration of sinus rhythm in atrial fibrillation: Recommendations"](#)).

However, maintenance of normal sinus rhythm (NSR) is often problematic. Only 20 to 30 percent of patients who are successfully cardioverted will maintain NSR for more than one year without chronic antiarrhythmic therapy [[1-7](#)]. The risk of recurrence is highest in the patient who has hypertension, an enlarged LA, AF for more than one year, or heart failure [[8](#)]. On the other hand, patients who are most likely to maintain NSR usually have one or more of the following characteristics:

- LA size less than 4.5 or 5 cm

Antiarrhythmic drugs to maintain sinus rhythm after cardioversion in atrial fibrillation: Clinical trials

▶ CLASS IA ANTIARRHYTHMIC DRUGS

• [Efficacy and proarrhythmia](#)

▶ CLASS IC ANTIARRHYTHMIC DRUGS

▶ CLASS III ANTIARRHYTHMIC AGENTS

• [Sotalol](#)

• [Amiodarone](#)

• [Dofetilide](#)

• [Azimilide](#)

• [Ibutilide](#)

▶ BETA BLOCKERS

▶ MAGNESIUM

▶ COMBINATION ANTIARRHYTHMIC DRUG THERAPY

▶ HYBRID THERAPY IN PATIENTS WHO DEVELOP ATRIAL FLUTTER

▶ REFERENCES

GRAPHICS

▶ [Quinidine in AF](#)

▶ [Proarrhythmia in CAST](#)

▶ [AF sotalol versus amiodarone](#)

▶ [Post CABG AF with amiodarone](#)

▶ [Embolic risk with AF](#)

▶ [Warfarin in AF](#)

Antiarrhythmic drugs to maintain sinus rhythm after cardioversion in atrial fibrillation: Clinical trials

[Morton F Arnsdorf, MD, MACC](#)

UpToDate performs a continuous review of over 270 journals and other resources. Updates are added as important new information is published. The literature review for version 10.1 is current through December 2001; this topic was last changed on December 5, 2001. The next version of UpToDate (10.2) will be released in June 2002.

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Getting to PubMed



PubMed Response

for atrial fibrillation

[Limits](#) [Preview/Index](#) [History](#) [Clipboard](#)

Display

Show: Items 1-20 of 15894 Page 1 of 795

1: [Kalaria RN.](#)

Small vessel disease and Alzheimer's dementia: pathological considerations
Cerebrovasc Dis. 2002;13 Suppl 2:48-52.
PMID: 11901243 [PubMed - in process]

2: [Bertomeu Martinez V, Morillas Blasco PJ, Gonzalez Juanatey JR, Alegria Ezquerro Gonzalez Maqueda I, Frutos Garcia A, Valero Parra R, Rodriguez Ortega JA.](#)

[Antithrombotic treatment in hypertensive patients with chronic atrial fibrillation]
Med Clin (Barc). 2002 Mar 16;118(9):327-31. Spanish.
PMID: 11900700 [PubMed - in process]

3: [Chinushi Y, Chinushi M, Toida T, Aizawa Y.](#)

Class I antiarrhythmic drug and coronary vasospasm-induced T wave alteration in a patient with Brugada syndrome and vasospastic angina
J Cardiovasc Electrophysiol. 2002 Feb;13(2):101-4.

- [National Guideline Clearinghouse](#)*** -
- [Cochrane](#)*** - Systematic reviews of literature
- [TRIP - CeRes](#)*** - British meta-search engine
- [Clinical Queries - PubMed](#)*** - Evidence-based medicine
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PubMed Clinical Query

National Library of Medicine
PubMed

PubMed Nucleotide Protein Genome

Search PubMed for

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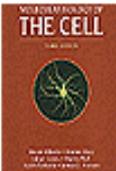
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MeSH Browser
Single Citation Matcher
Batch Citation Matcher
Clinical Queries
Related Resources

PubMed is the National Library of Medicine's search service that provides access to over 10 million citations in MEDLINE, PreMEDLINE, and other related databases, with links to participating online journals.

Books linked to PubMed

 In collaboration with book publishers, NCBI is adapting [books](#) for the web and linking them to PubMed. The first book, *Molecular Biology of the Cell* by Alberts et al., is now available.

The New PubMed!

This new version of PubMed has a single search interface with pull-down menus that display search field limits, indexes, your search history, and a clipboard for gathering selected articles. See [help](#) and [FAQ](#) for more information.

PubMed, Clinical Query, cont'd

[Website](#)

PubMed

[Nucleotide](#)

[Protein](#)

[Genome](#)

[Structure](#)

[Pop Set](#)

Clinical Queries using Research Methodology Filters

This specialized search is intended for clinicians and has built-in search "filters" based largely upon [Haynes RB et al.](#) Four study categories--therapy, diagnosis, etiology, prognosis--are provided, and you may indicate whether you wish your search to be more sensitive (i.e., include most relevant articles but probably including some less relevant ones) or more specific (i.e. including mostly relevant articles but probably omit a few). See [this table](#) for details regarding filtering.

Question

Indicate the category and emphasis below:

Category: therapy diagnosis etiology prognosis

Emphasis: sensitivity specificity

Context

Enter subject search (do not repeat any of the words above):

atrial fibrillation

Search

Reset

Subject matter

Controlled Vocabulary for Subject Matter

[All MeSH Categories](#)

[Diseases Category](#)

[Cardiovascular Diseases](#)

[Heart Diseases](#)

[Arrhythmia](#)

Atrial Fibrillation

[All MeSH Categories](#)

[Diseases Category](#)

[Pathological Conditions, Signs and Symptoms](#)

[Pathologic Processes](#)

[Arrhythmia](#)

Atrial Fibrillation

- blood
- chemically induced
- classification
- complications
- congenital
- diagnosis
- drug therapy
- economics
- embryology
- enzymology
- epidemiology
- ethnology
- etiology
- genetics
- history
- immunology
- metabolism
- mortality
- nursing
- pathology
- physiopathology
- prevention and control
- psychology
- radiography
- radionuclide imaging
- radiotherapy
- rehabilitation
- surgery
- therapy
- ultrasonography
- urine
- veterinary

www.ncbi.nlm.nih.gov/pubmed



PubMed

PubMed comprises more than 21 million citations for biomedical literature from MEDLINE, life science journals, and online books. Citations may include links to full-text content from PubMed Central and publisher web sites.

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[Clinical Queries](#)

[Topic-Specific Queries](#)

More Resources

[MeSH Database](#)

[Journals in NCBI Databases](#)

[Clinical Trials](#)

[E-Utilities](#)

[LinkOut](#)



- Key concepts!
- Auther

Stopwords

Stopwords	
A	a, about, again, all, almost, also, although, always, among, an, and, another, any, are, as, at
B	be, because, been, before, being, between, both, but, by
C	can, could
D	did, do, does, done, due, during
E	each, either, enough, especially, etc
F	for, found, from, further
H	had, has, have, having, here, how, however
I	i, if, in, into, is, it, its, itself
J	just
K	kg, km
M	made, mainly, make, may, mg, might, ml, mm, most, mostly, must
N	nearly, neither, no, nor
O	obtained, of, often, on, our, overall
P	perhaps, pmid
Q	quite
R	rather, really, regarding
S	seem, seen, several, should, show, showed, shown, shows, significantly, since, so, some, such
T	than, that, the, their, theirs, them, then, there, therefore, these, they, this, those, through, thus, to
U	upon, use, used, using
V	various, very
W	was, we, were, what, when, which, while, with, within, without, would

MeSH(The Medical Subject Headings)

Examples of MeSH Headings:

- **Body Weight**
- **Dental Cavity Preparation**
- **Radioactive Waste**
- **Kidney**
- **Self Medication**
- **Brain Edema**

Face

Cheek
Chin
Eye
Eyebrows
Eyelids
Eyelashes
Forehead
Mouth
Lip
Nose
Parotid Region

<http://www.youtube.com/watch?v=uyF8uQY9wys>

Exercise

- Use the MeSH Database to build a strategy that will find citations to references discussing the economics of community-acquired pneumonia.

Exercise

- Use the NLM Catalog Journal search page to see if PubMed includes the journal, *Molecular Microbiology*. If so, retrieve all PubMed citations from this journal.

Exercise

- Use the Clinical Queries to find systematic reviews for accidents caused by sleep deprivation.

Search

- What role does pain have in sleep disorders?

Search

- To search for citations to articles written by Bonnie W. Ramsey about gene therapy for cystic fibrosis

Search

- To search for citations to articles about drosophila in the journal Molecular Biology of the Cell

Exercise

- Find citations to articles about the ethics of liver transplantation. Check Details to see how the terms are mapped. Filter to review articles. Select a few items and add them to the Clipboard. Go to the Clipboard and view the selected items in Abstract format to see the assigned MeSH terms.

Exercise

- Use the MeSH Database to build a strategy that will find citations to articles about schizophrenia resulting from prenatal exposure to influenza. Schizophrenia and influenza should be the major topics of the articles.

361,987
عدد مرات مشاهدة الفيديو

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من المشتركين

4,782

اشترك



NCBI YouTube Channel



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تصفح مقاطع الفيديو

مقاطع فيديو مميزة

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Videos from the National Center for Biotechnology Information including presentations and tutorials about NCBI biomolecular and biomedical literature databases and tools

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19/02/2010

الولايات المتحدة

Builder

All Fields

AND All Fields

Search or Add to history

History

Search	Add to builder	Query
#1	Add	Search hyperxycemia[MESH Terms] AND newborn

- AND in builder
- OR in builder
- NOT in builder
- Delete from history
- Show search results
- Show search details
- Save in My NCBI

You are here: NCBI > Literat

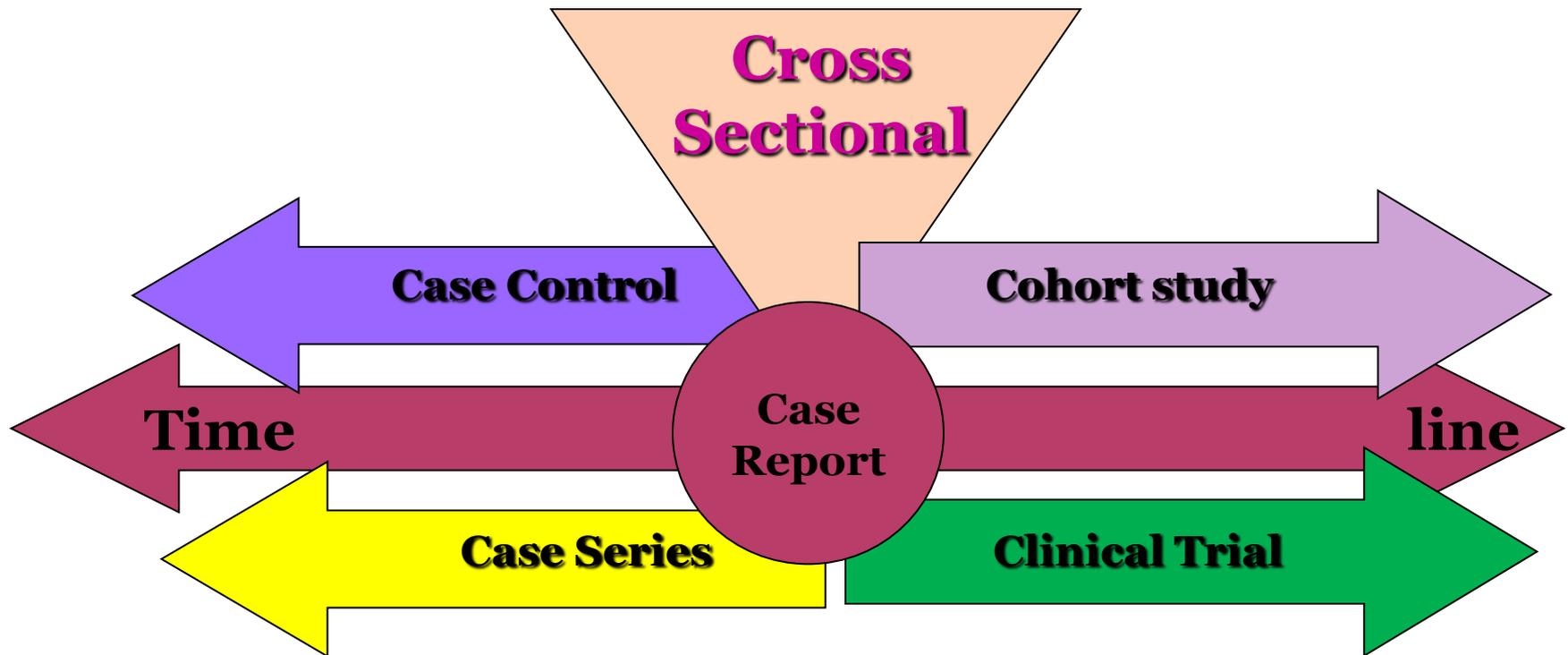
GETTING STARTED POPULAR FEATURED

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72,184

PubMed Advanced Search Builder

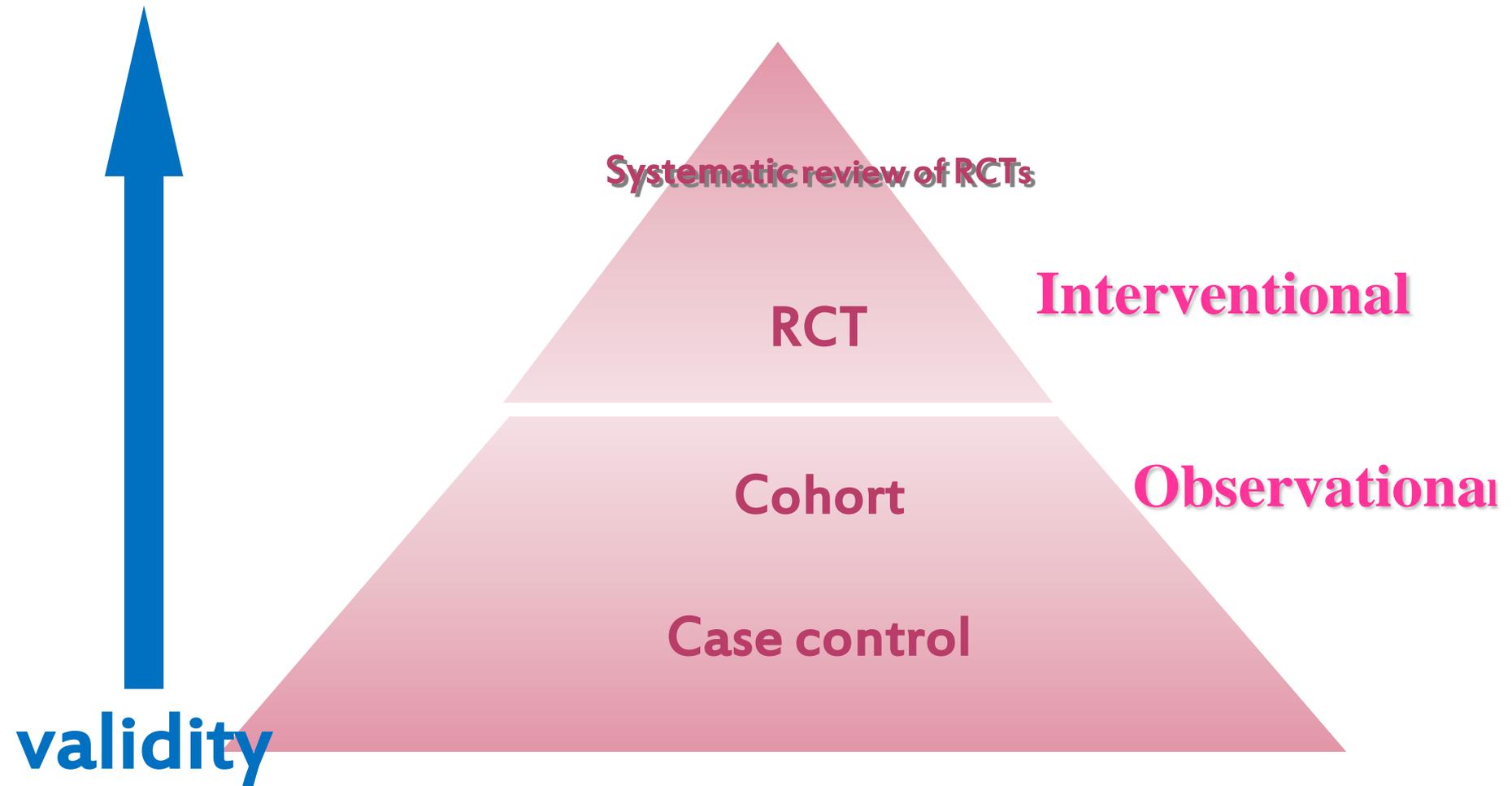
Types of Studies

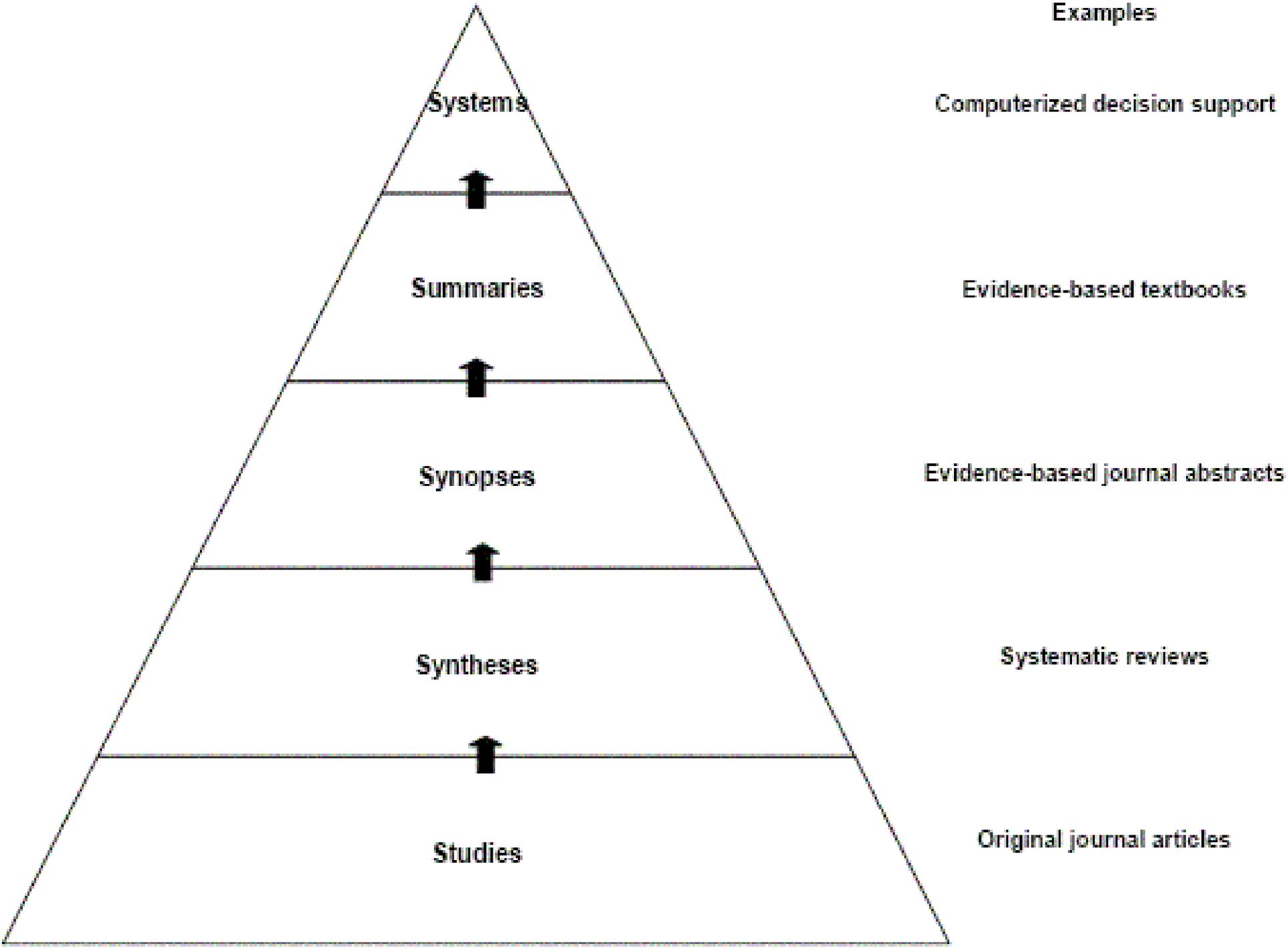


Types of Epidemiological Studies

- Observational
 - Case Reports, Case series
 - Cross - Sectional
 - Case- Control
 - Cohort
- Interventional
 - Clinical Trials

Hierarchy of major study designs





Examples

Systems

Computerized decision support



Summaries

Evidence-based textbooks



Synopses

Evidence-based journal abstracts



Syntheses

Systematic reviews



Studies

Original journal articles



Thank You!

