کارگاه کتابدار بالینی
Clinical Librarian Workshop

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Objectives of the workshop

- Definition of Clinical Librarian
- Functions of a Clinical Librarian
- Objectives of Clinical Librarian
- History of Clinical Librarian
- The Main Tasks of Clinical Librarian
- New Profile of the Clinical Librarian
- The Role of Clinical Librarian
- The Main Skills of Clinical Librarian
- The Expected Educations from a Clinical Librarian
- Who are the clients?
- The Training Courses should be passed by a clinical Librarian

Definition of Clinical Librarian

- **C**linical **M**edical **L**ibrarian (CML) services involve placing medical librarians at the point of decision-making within acute care institutions (Sladek 2004)

- "Providing quality filtered information to clinician at the point of need to promote evidence-based health care"(Winning & Beverly, 2003)

Functions of a Clinical Librarian

- **Takes the Library to the user**

- **Often provides information before they have asked for it**

Objectives of Clinical Librarian

- To overcome the time, cost and expertise barriers that clinicians face when they attempt to incorporate the best current evidence from the literature into their patient care decisions.

- To enhance the educational experience of students and resident physicians in training.

تاریخچه کتابداری مبتنی بر شواهد

- شناخت بیشتر رویکرد مبتنی بر شواهد ابتدا مستلزم مروری گذرا بر تاریخچه پیدایش آن است. سالها قبل از طرح این موضوع در کتابداری و اطلاع رسانی، بحث «پزشکی مبتنی بر شواهد» در حوزه پزشکی مطرح شده بود.
- در سال ۱۹۷۱، خانم «لمب» پیشنهاد کرد که کتابداران و متخصصان اطلاعاتی آموزش دیده بایستی اعضای فعالی در تیم های مراقبت بهداشتی باشند، مشابه دیدگاه پزشکی بالینی و شامل کار تیم های مراقبت بیمار
- علاوه بر این هدف، او اولین برنامه کتابدار پزشکی بالینی را در دانشگاه میسوری در شهر کانزاس (دانشکده پزشکی) شروع کرد
- در سال ۱۹۷۴ دومین برنامه را در بیمارستان Health Center in Harford شروع کرد.

تاریخچه کتابداری مبتنی بر شواهد

- در سال ۱۹۹۴ کالج پزشکی دانشگاه ویرجینیا برنامه کتابداری پزشکی بالینی را آغاز کرد و کتابداران به دانشجویان پزشکی شیوه دسترسی به اطلاعات و منابع پزشکی را در دوره پزشکی داخلی خود آموزش دادند.
- پس از آن در کتابخانه پزشکی اسکاتلند سه سیستم توسعه یافت:
- اولی موجب تامین خدمات بالینی کتابداران به کارمندان بالینی
- دومی این خدمات را به محققان پزشکی ارائه کرد
- سومی اجازه داد تا کتابداران سوال ها را پاسخ داده و موقعیت های پزشکی و همچنین اصطلاحات پزشکی را برای بیماران و عموم توضیح دهند

تاریخچه کتابداری مبتنی بر شواهد

- در سال ۲۰۰۰ دکتر «جاناتان الدرج» استادیار دانشگاه نیومکزیکو با انتشار مقاله ای تحت عنوان «**مروری بر کتابداری مبتنی بر شواهد**» در مجله کتابداری پزشکی امریکا چهارچوبی نظری برای اجرای این رویکرد در حرفه کتابداری پیشنهاد کرد. چارچوب نظری وی شامل پنج مرحله و هفت مولفه بود.

ضرورت حضور کتابدار بالینی

- گسترش روزافزون انتشارات حوزه پزشکی، پیچیدگی‌های خاص محیط‌های درمانی و به ویژه مسئله زمان و محدودیت‌های زمانی که معمولا کارکنان و پزشکان دخیل در درمان همواره با آن روبه رو هستند، جستجوی موثر اطلاعات و دسترسی به اطلاعات موثق و کارآمد در زمان مناسب را تبدیل به یکی از آرمانها و اهداف پزشکان و مدیران امور درمانی کرده است.
- در دهه‌های اخیر تقاضا برای دسترسی به اطلاعات هم توسط بیماران و هم متخصصان حوزه سلامت افزایش یافته است. ضرورت کتابدار بالینی را فراهم‌آوری اطلاعات برای بیماران، خانواده های آنها و نیز پزشکان و متخصصان بهداشتی بیان نموده اند
- از این رو توجه به کتابدار بالینی به عنوان مشاور اطلاعاتی در نظام سلامت ضروری است.

تعریف کتابداری مبتنی بر شواهد

- کتابداری و اطلاع رسانی مبتنی بر شواهد که در این رشته ابتدا در گرایش کتابداری پزشکی مطرح شد، به معنای استفاده بهینه از یافته های پژوهشی موجود در تدوین و بازنگری فعالیتهای حرفه‌ای کتابداران و متخصصان اطلاع رسانی است.
- کتابداری مبتنی بر شواهد، با سابقه‌ای ده ساله، رویکردی نسبتاً نوین در این رشته محسوب می شود، که بر اساس آن ابتدا کتابداران به گردآوری و تفسیر یافته های علمی می پردازند و سپس زمینه لازم را برای تلفیق دانش جدید در فعالیتهای حرفه ای خود فراهم می آورند.
- به زبانی ساده‌تر، کتابداری مبتنی بر شواهد یعنی تلاش برای بهبود خدمات و عملکرد کتابخانه ها و مراکز اطلاع رسانی از طریق پیوند میان دو عرصه نظر و عمل. به این ترتیب، هر تصمیمی که با رویکرد مبتنی بر شواهد گرفته شود پشتوانه‌ای پژوهشی دارد، و خود می تواند الگویی برای تصمیمهای مشابه در شرایط مشابه باشد

مهارت های مورد نیاز کتابدار بالینی

- آشنایی با مفاهیم پایه و کاربردی علوم پزشکی
- آشنایی با پایگاه های اطلاعاتی حوزه پزشکی و شواهد بالینی
- آشنایی با فناوری اطلاعات و ارتباطات
- آشنایی با زبان انگلیسی عمومی و تخصصی حوزه پزشکی
- مهارت جستجو و بازیابی اطلاعات و روشهای آن
- توانایی ارزیابی علمی اطلاعات بازیابی شده
- آشنایی با اصول سازماندهی اطلاعات و چکیده نویسی و نمایه سازی
- آشنایی با اصول تدریس و آموزش
- توانایی برقراری ارتباط موثر با دیگران

کتابدار بالینی: رابط (شبکه ارتباطی کادر درمانی)

کتابدار بالینی: یاور و همکار

- گزارش‌های صبحگاهی: پیگیری موارد و بیماران خاص و فراهم نمایی شواهد و منابع برای سوالات
- حضور در راندهای آموزشی: راهنما و پاسخگوی سوالات بالینی
- کنفرانس‌های نیم روزی: آموزش مهارت‌های اطلاعاتی
- آموزش رسمی: آموزش منابع و سوالات بالینی
- حضور در وب: خلق کننده پورتالها و منابع آموزشی برخط به منظور گسترش عمل مبتنی بر شواهد
- مدیریت: فراهم آوری جستجوهای تخصصی برای گسترش کیفیت موارد بالینی
- تهیه راهنماهای آموزشی

SEARCH AND RETREIVE THE BEST EVIDENCE

"SO MUCH INFORMATION, SO LITTLE TIME!"

Learn and Practice various SEARCH STRATEGIES:

- To find useful information quickly
- To eliminate irrelevant, inappropriate or weak information

The Role of Clinical Librarian

- Searching or helping to search for Evidence
- Evidence educators
- Dissemination of information
- Collaboration
- "Infomediaries" between patients and physicians

The Main Skills of Clinical Librarian

- Familiarity with Medline, CINAHL and other relevant health databases
- Hand-held technology
- User education
- Project management
- Medical terminology courses

The Expected Educations from a Clinical Librarian

- Basic education in librarianship (college level)
- University education (mostly biomedical)
- Medical terminology by experience
- Courses: (presentation skills, primary medical knowledge, database skills, EBM, Systematic Reviews)

WHO ARE THE CLIENTS?

- Students
- Doctors
- Nurses
- Researchers
- Paramedical personnel
- No patients

The Training Courses should be passed by a clinical Librarian.

- PubMed
- Cochrane Library
- Evidence Based Resources
- OVID databases: EMBASE, CINAHL
- Reference Manager, Endnote

Thank you for your patience

مقالات مروری نظام‌مند و جایگاه آن‌ها در تصمیم‌گیری بالینی

انواع مقالات در علوم پزشکی

- Original Article
- Review Article
- Case Reports
- Editorial
- Short Communication (short papers)
- Letter to Editor

- مقاله پژوهشی اصیل
- مقاله مروری
- مقاله گزارش مورد
- سرمقاله (سخن سردبیر)
- مقاله کوتاه
- نامه به سردبیر

انواع مقالات مروری در علوم پزشکی

- مقالات مروری سنتی
  (مرور روایتی)
  - Traditional Review Articles
    (Narrative Review)
- مقالات مروری نظام‌مند
  مرور ساختاردار (فراتحلیل)
  - Systematic Review
    (Meta-analysis)

Medical Publishing Scope

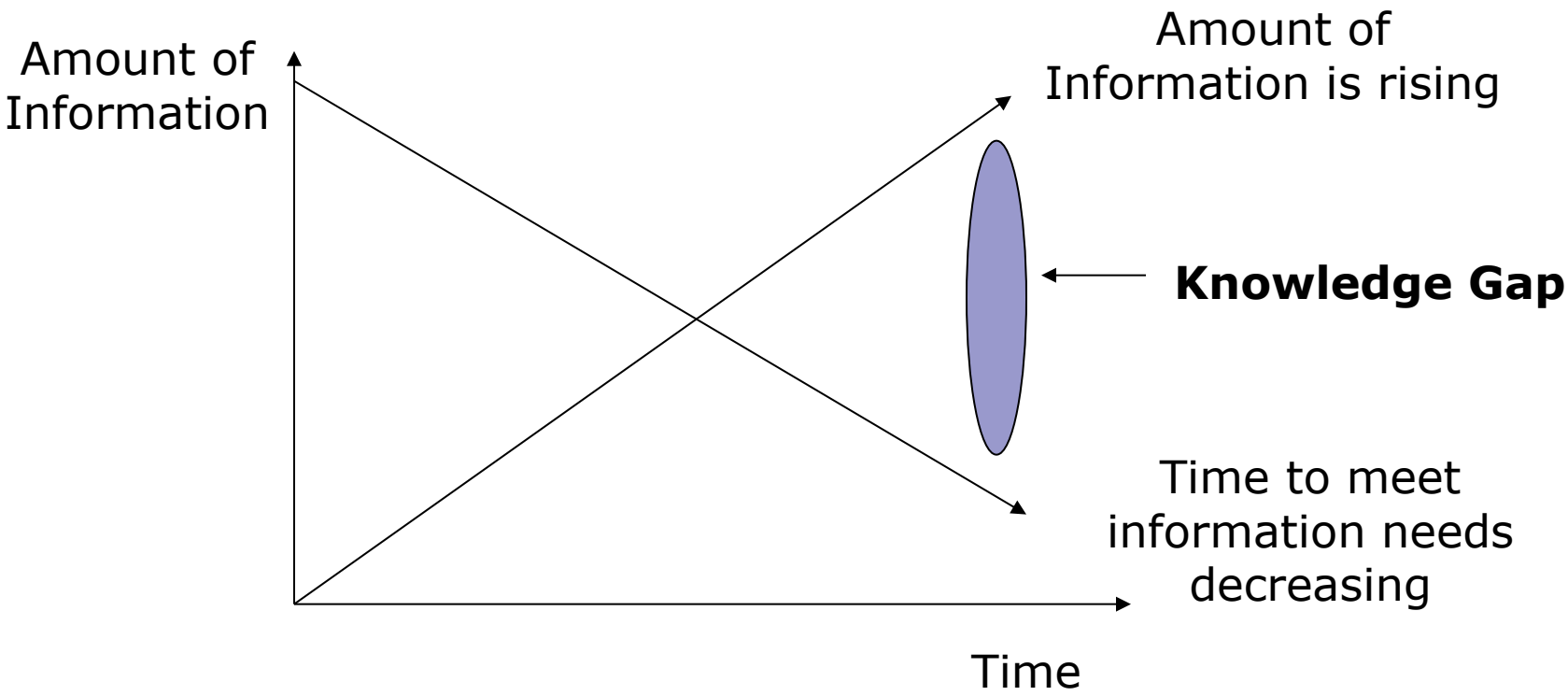
Annually:

- **+20,000 journals**
- **+17,000 new books**

MEDLINE:

- **+5,000 journals**
- **+25 Million references**
- **400,000 new entries yearly**

مشکل فاصله اطلاعاتی



The Knowledge Gap

Half-time or Half-life of Clinical Medical Science

Half-time or Half-life of Clinical Medical Science is now

about 6 Month

Doubling time of biomedical science was

about 19 years in 1991

Doubling time of biomedical science was

about 20 months in 2001

So you work in a job which:

- Its half-time (half-life) is 6 months, &
- Its doubling-time is 20 months
- You works in a ever-changing & ever-growing profession!
- So you should keep updating!

For General Physicians to keep current:

- **Read 19 new articles per day which appear in medical journals.**

- **19 x 2 hrs (Critical Appraisal) = 38 hrs per day**
- **Davidoff F et al. (1995)**
- ***EBM: A new journal* to help doctors identify**
- **the information they need. BMJ 310:1085-86.**

What is ‘level of evidence’?

- The extent to which one can be confident that an estimate of effect or association is correct (unbiased).

Hierarchy of studies

Evidence Pyramid

Levels of Evidence

Level of Evidence	Type of Study
1a	Systematic reviews of randomized clinical trials (RCTs)
1b	Individual RCTs
2a	Systematic reviews of cohort studies
2b	Individual cohort studies and low-quality RCTs
3a	Systematic reviews of case-controlled studies
3b	Individual case-controlled studies
4	Case series and poor-quality cohort and case-control studies
5	Expert opinion based on clinical experience

Adapted from: Sackett DL et al. *Evidence-Based Medicine: How to Practice and Teach EBM*. 2nd ed. Churchill Livingstone; 2000.

Systematic reviews

- Postdam Consultation on Meta-analysis (Cook et al, 1995) defined a systematic review as
- **"application of scientific strategies that limit bias to the systematic assembly, critical appraisal and synthesis of all relevant studies on a specific topic"**

Systematic Reviews

- **Systematic review** is a method of
  - locating,
  - appraising,
  - and synthesizing evidence
  - while making explicit efforts to limit bias
- > a quarter of a century since Gene Glass coined the term "meta-analysis" to refer to the quantitative synthesis of the results of primary studies

A ‘systematic review’, therefore, aims to be:

- **Systematic** (e.g. in its identification of literature)
- **Explicit** (e.g. in its statement of objectives, materials and methods)
- **Reproducible** (e.g. in its methodology and conclusions

Systematic Review

"Scientific tool which can be used to summaries, appraise, and communicate the results and implications of otherwise unmanageable quantities of research" (NHS CRD, 1996).

Systematic Review

- the process by which similar studies, identified from a comprehensive trawl of numerous sources, are summarized in easy-to-read graphical or tabular form and then their collective message or "‘bottom line’ presented, together with implications for practice and future research (Booth & Haines, 1998).

They are not conventional Reviews

- Follow a strict methodological and statistical protocol
  - more comprehensive
  - minimising the chance of bias
  - improves transparency, repeatability and reliability

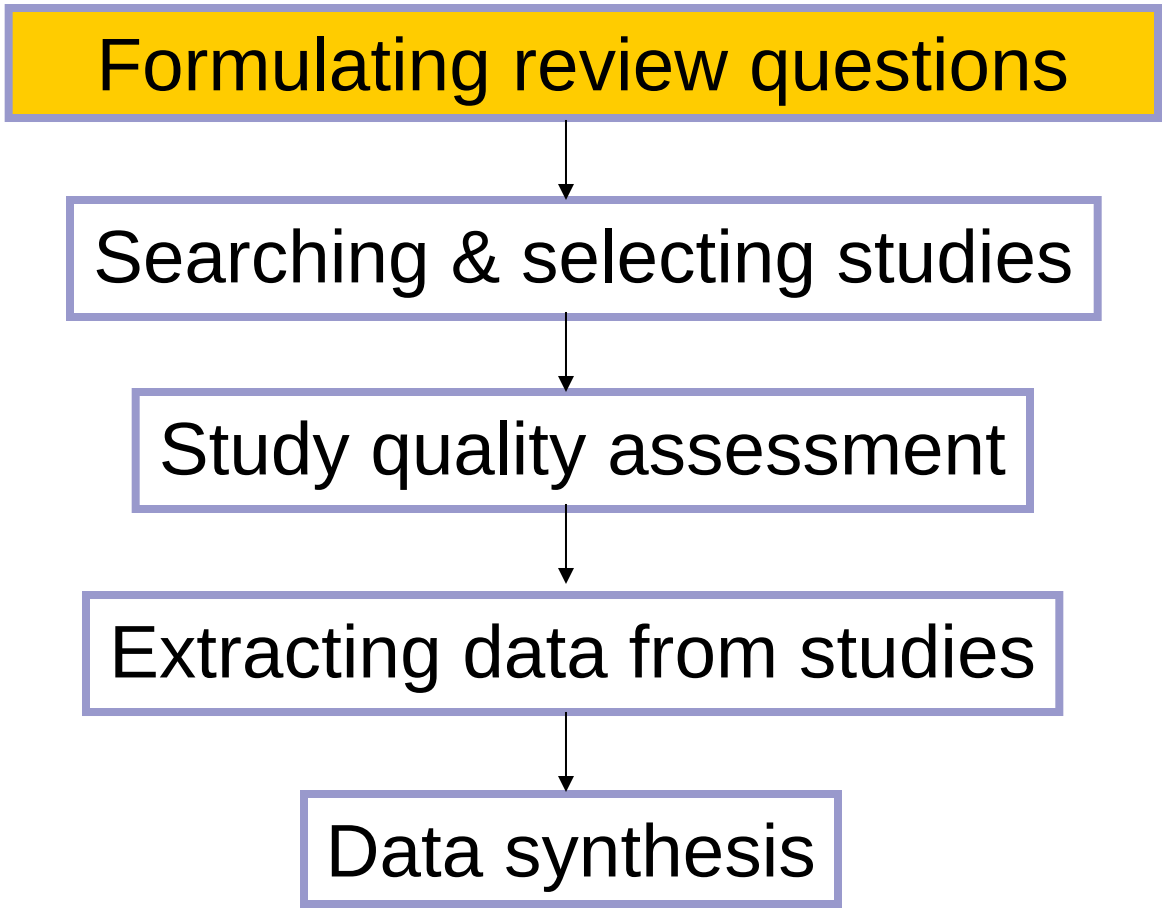
تفاوت مقاله مروری سنتی و مروری نظام‌مند

(Adapted from Cook, D. J. et. al. (1997). Ann. Intern. Med. 126: 376-380)

Feature	Traditional Review	Systematic Review
Question	Often broad in scope	Focused question
Sources & search	Not usually specified, potentially biased	Comprehensive sources & explicit search strategy
Selection	Rarely specified, potentially biased	Criterion-based selection, uniformly applied
Appraisal	Variable	Rigorous critical appraisal, uniformly applied
Synthesis	Often a qualitative summary	Quantitative summary* when appropriate
Inferences	Sometimes evidence-based	Evidence-based

*A quantitative summary that includes a statistical synthesis is a meta-analysis

مراحل انجام مطالعه مروری نظام‌مند (۱)



قالب‌بندی عنوان مطالعه مروری نظام‌مند

- The first and most important decision in preparing a review is to determine its focus
- This is best done by asking clearly framed questions.
- Define a four part clinical question, breaking the question down into its component parts

Question components: PICO

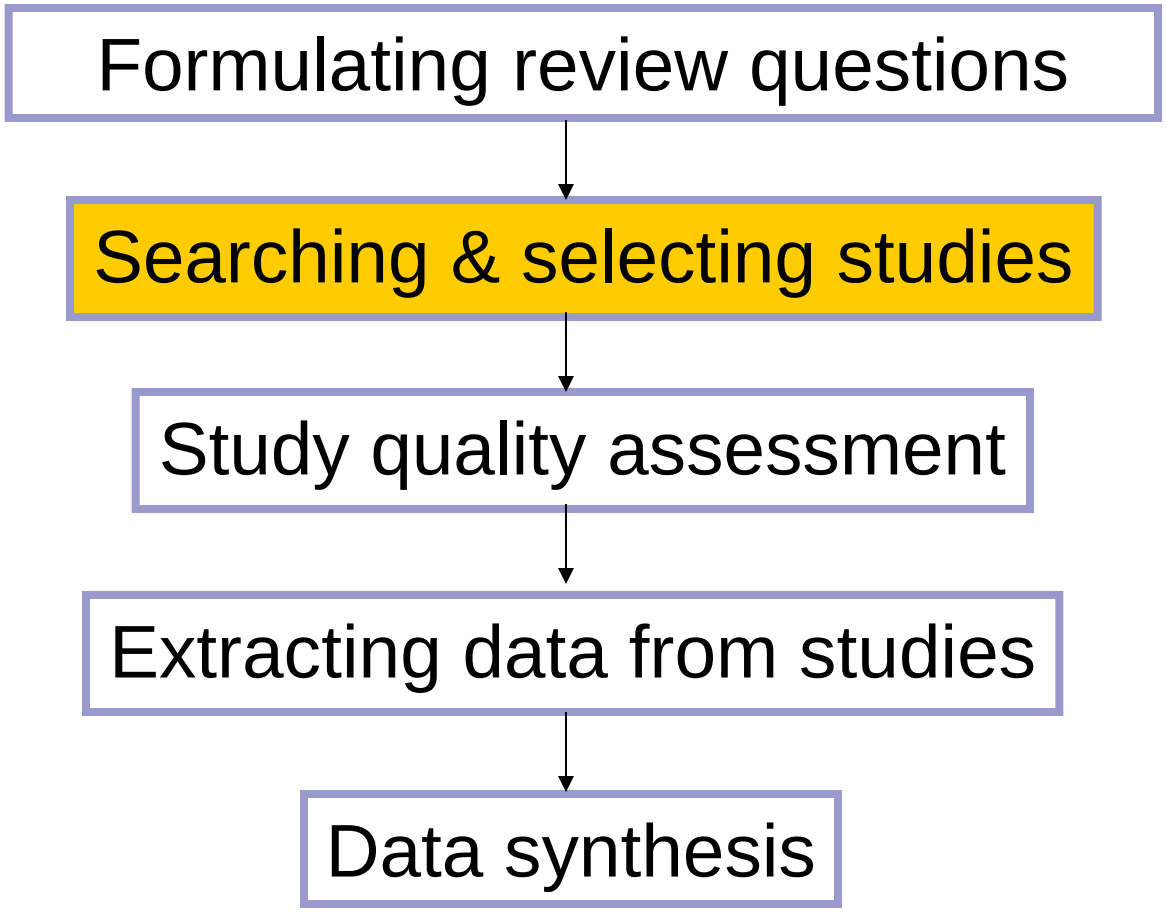
- What types of **P**atients?
- What types of **I**nterventions?
- What types of **C**omparison?
- What types of **O**utcomes?

طراحی سئوال بالینی در قالب PICO

Components of Clinical Questions

Patient/ Population	Intervention/ Exposure	Comparison	Outcome
In patients with acute MI	does early treat-ment with a statin	compared to placebo	decrease cardio-vascular mortality?
In women with suspected coronary disease	what is the accuracy of exercise ECHO	compared to exercise ECG	for diagnosing significant CAD?
In post-menopausal women	does hormone replacement therapy	compared to no HRT	increase the risk of breast cancer?

مراحل انجام مطالعه مروری نظام‌مند



Selecting studies

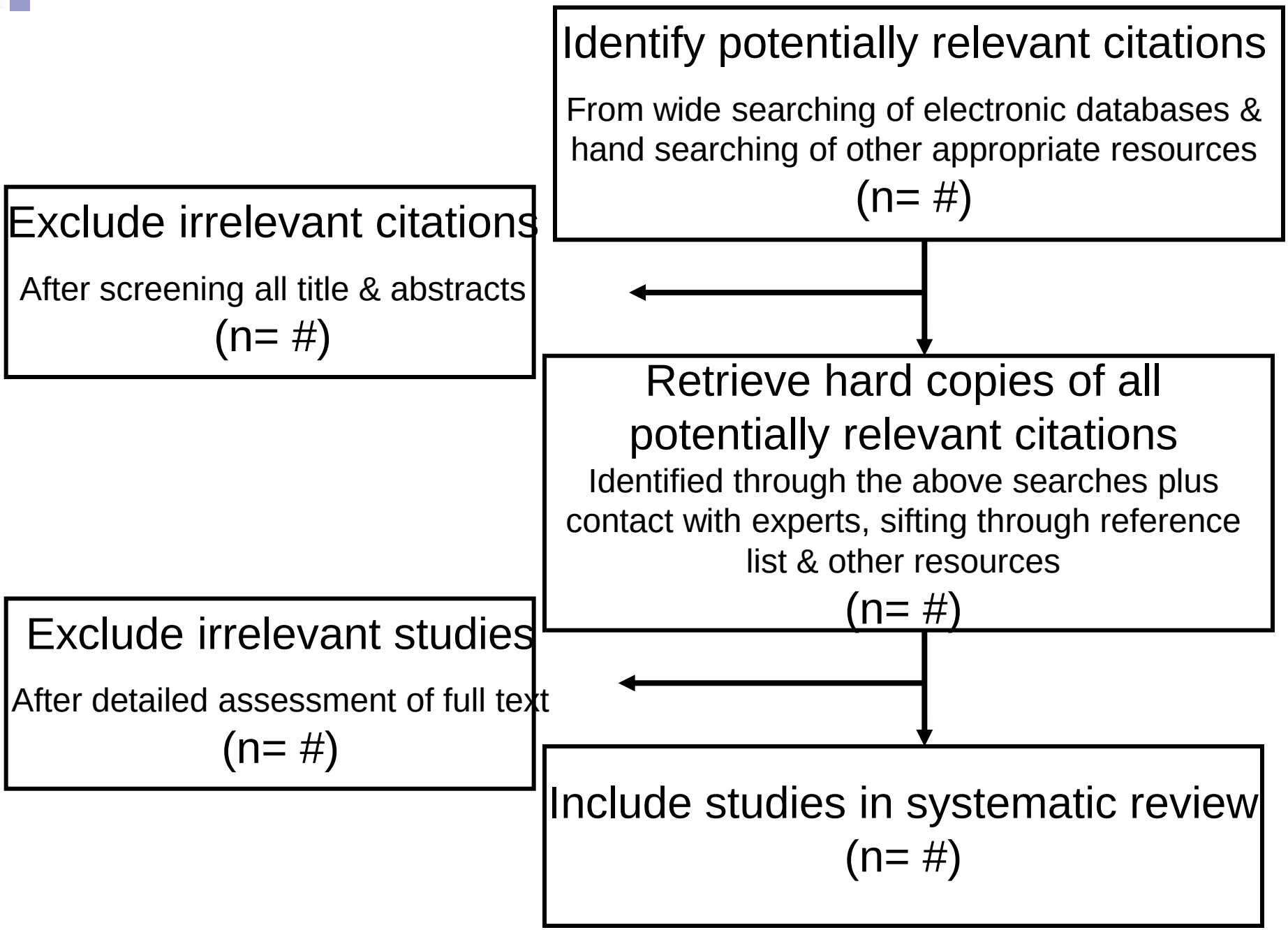
- **performing a comprehensive, objective, and reproducible search of the literature;**
- **selecting studies which meet the original inclusion and exclusion criteria;**
- ***can be the most time-consuming and challenging task in preparing a systematic review.***

Information Resources Used in Systematic Reviews

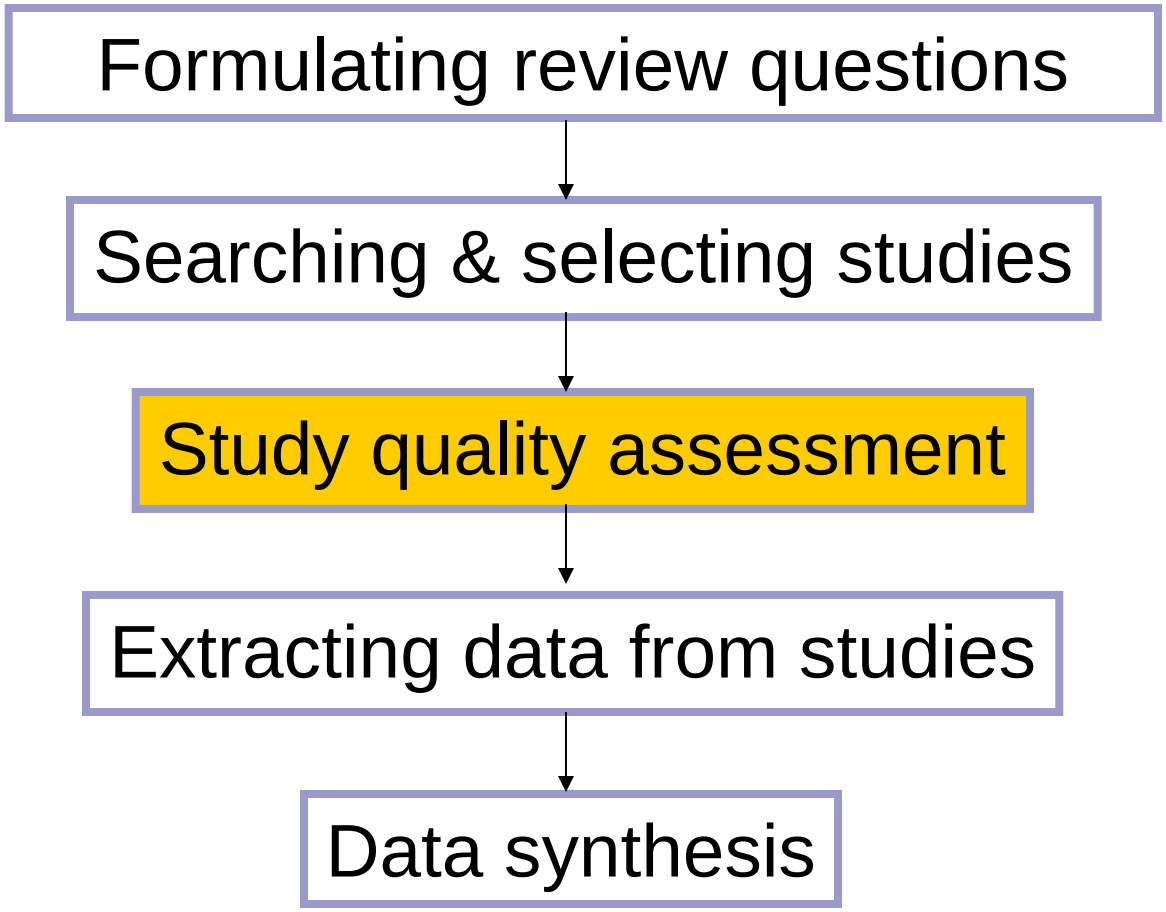
- **Electronic databases**
  - MEDLINE and EMBASE
  - The Cochrane Central Register of Controlled Trials (CENTRAL)
- **Conference proceedings & abstract books**
- **Hand searching**
- **“Grey literature”** (thesis, Internal reports, pharmaceutical industry files)
- **Checking reference lists**
- **Unpublished sources** known to experts in the specialty (seek by personal communication)
- **Raw data** from published trials

Generating A Search Strategy

- Multiple electronic databases and the internet using a range of **Boolean search-terms**
- Foreign language searches
- Include grey literature to avoid publication bias (see subsequent slides)
- Search bibliographies and contact experts


Identify potentially relevant citations
From wide searching of electronic databases & hand searching of other appropriate resources
(n= #)
Exclude irrelevant citations
After screening all title & abstracts
(n= #)
Retrieve hard copies of all potentially relevant citations
Identified through the above searches plus contact with experts, sifting through reference list & other resources
(n= #)
Exclude irrelevant studies
After detailed assessment of full text
(n= #)
Include studies in systematic review
(n= #)

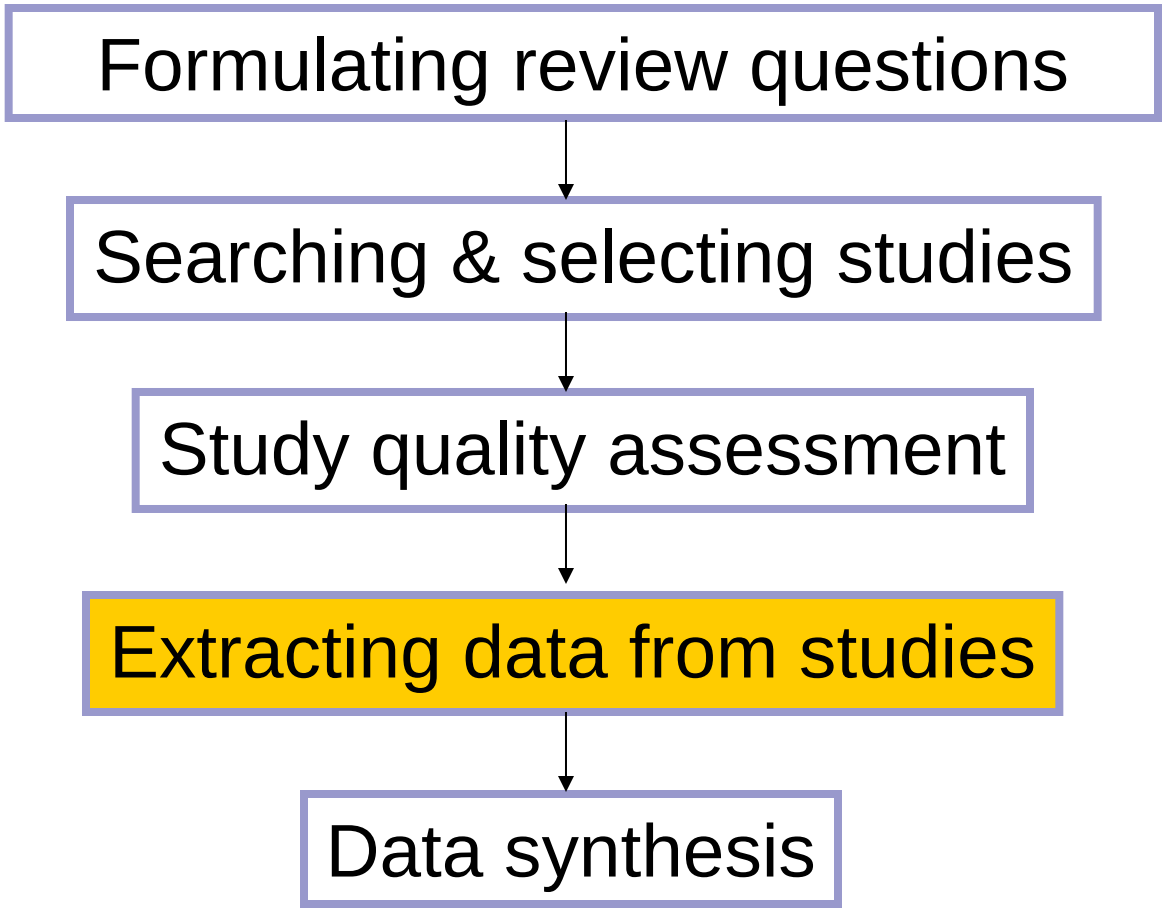
مراحل انجام مطالعه مروری نظام‌مند (۳)



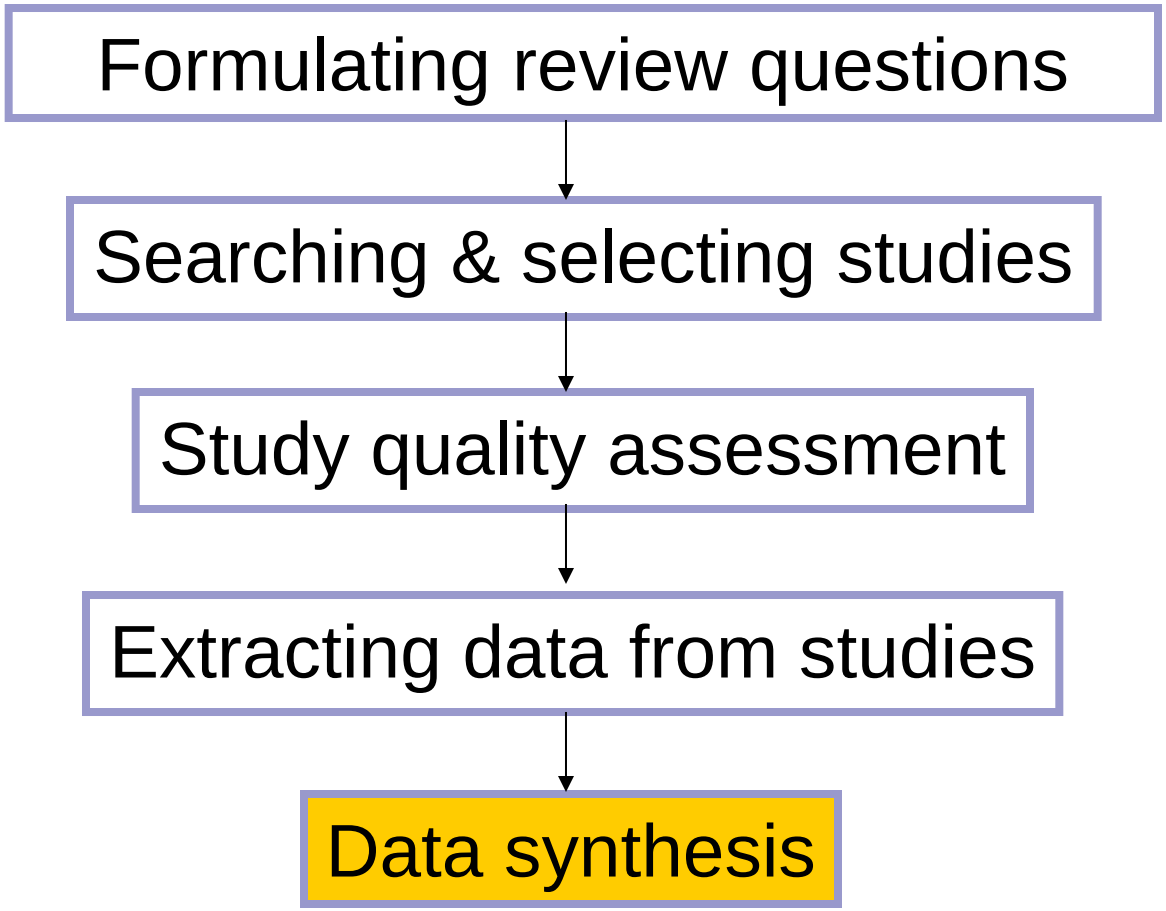
Appraising Study Quality

- There is no such thing as **a perfect study**, all studies have weaknesses, limitations, and biases.
- Interpretation of the findings of a study depends on **design**, **conduct** and **analysis**, as well as on the **population**, **interventions**, and **outcome** measures.
- The researchers in a primary study did not necessarily set out to answer your review question.

مراحل انجام مطالعه مروری نظام‌مند (٤)



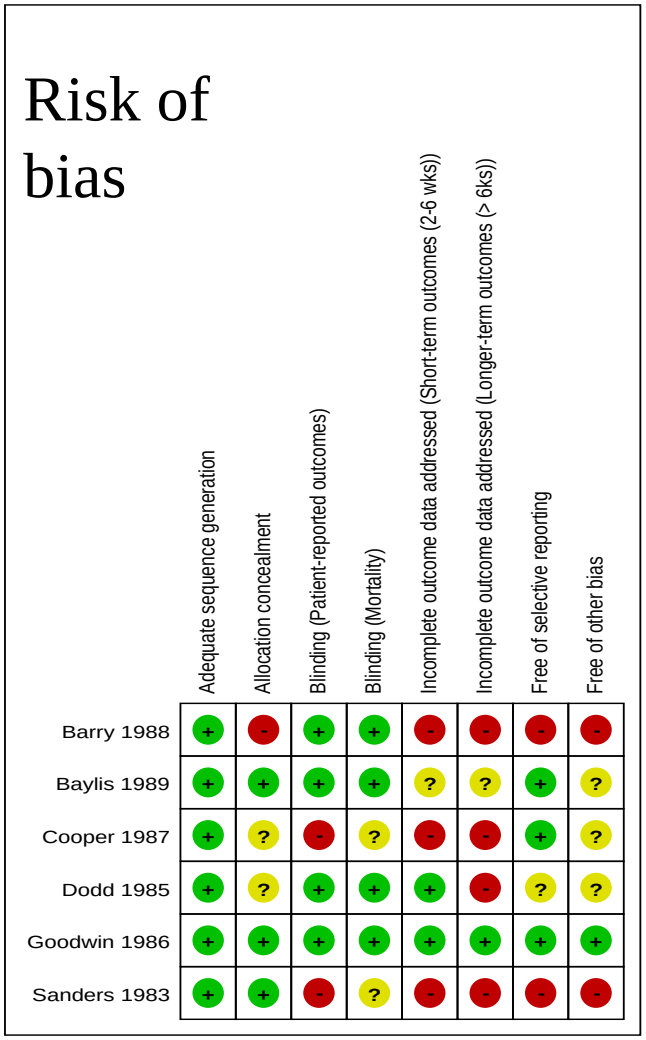
مراحل انجام مطالعه مروری نظام‌مند (۵)



Meta-Analysis

- when an overview incorporates a specific **statistical strategy** for assembling the results of several studies into a single estimate.

Assessment



1. **Sequence generation (randomization)**
2. **Allocation concealment**
3. **Blinding of participants, personnel and outcomes**
4. **Incomplete outcome data (attrition and exclusions)**
5. **Selective outcome reporting**
6. **Other (including topic-specific, design-specific)**

Critical appraisal and assessment of the risk of bias for each study

Risk of bias table

Item	Authors' judgment	Description
Adequate sequence generation?	Unclear	"Patients were randomly allocated"
Allocation concealment?	Unclear	No information.
Blinding?	Yes	"double blind design". "Millet... resembles lecithin in appearance... When ground, each substance could be distinguished from the other by hue and taste but staff were not informed as too which was which."
Incomplete outcome data addressed?	No	Data unavailable for meta-analysis. Randomised: lecithin = Not stated, placebo = Not stated, Total = 33.Missing: lecithin = 7 (non-cooperation or diarrhoea = 2; moved to nursing home = 4, death = 2), placebo = 5 (non-cooperation or diarrhoea = 3, death = 2), total missing = 36%.
Free of selective reporting?	No	No quantitative results reported due to lack of effect.It is apparently clear which outcomes were measured.
Free of other bias?	Yes	No problems apparent

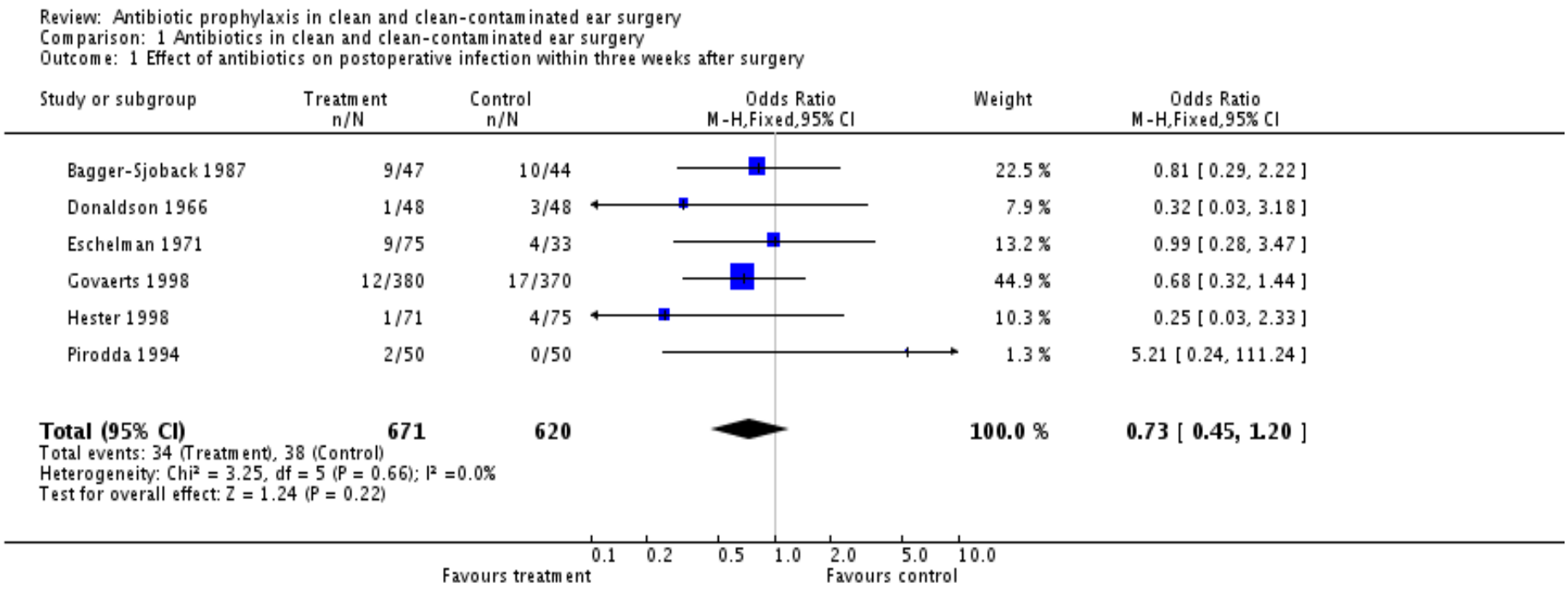
Synthesis of data

- “Once the data have been extracted and their quality and validity assessed, the outcomes of individual studies within a systematic review may be pooled and presented as summary outcome or effect
- When data are NOT too sparse, of too low quality or too heterogeneous

Meta-analysis

- “Meta-analysis is a statistical technique for combining the results of independent, but similar, studies to obtain an overall estimate of treatment effect.”
- The validity of a meta-analysis depends on the quality of the studies included,

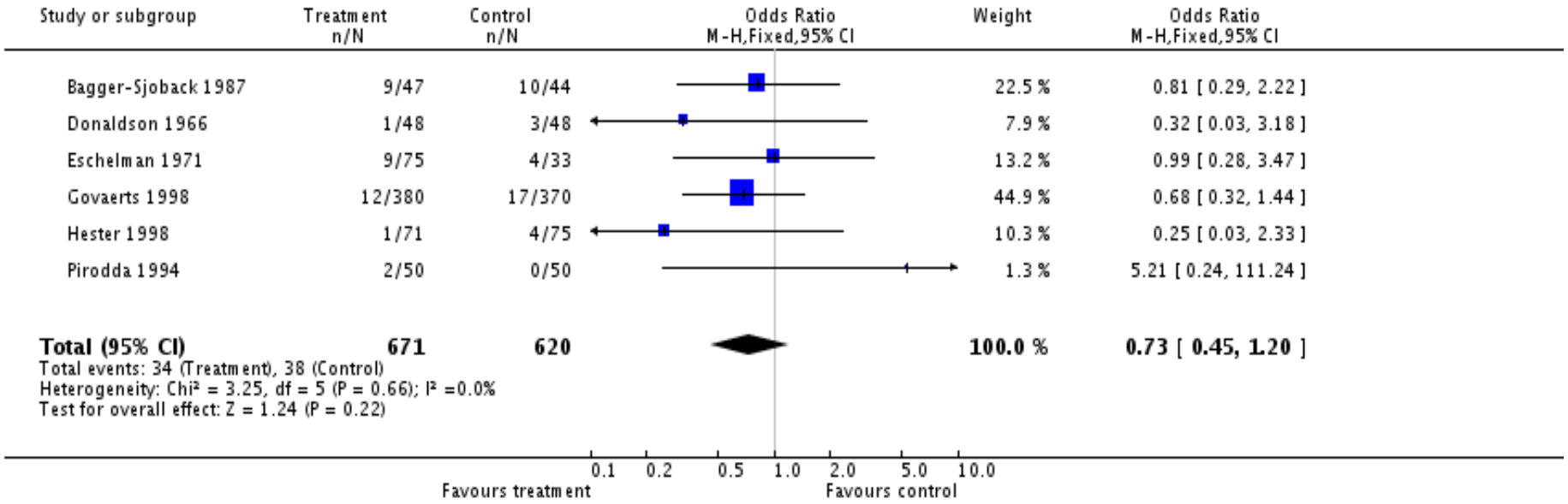
Meta-analysis- Forest plot

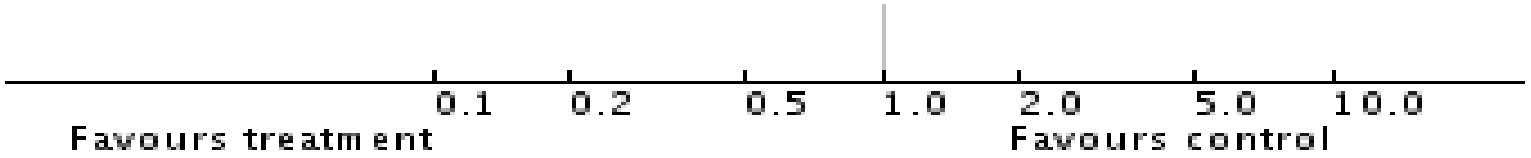


At the bottom there's a horizontal line. This is the scale measuring the treatment effect

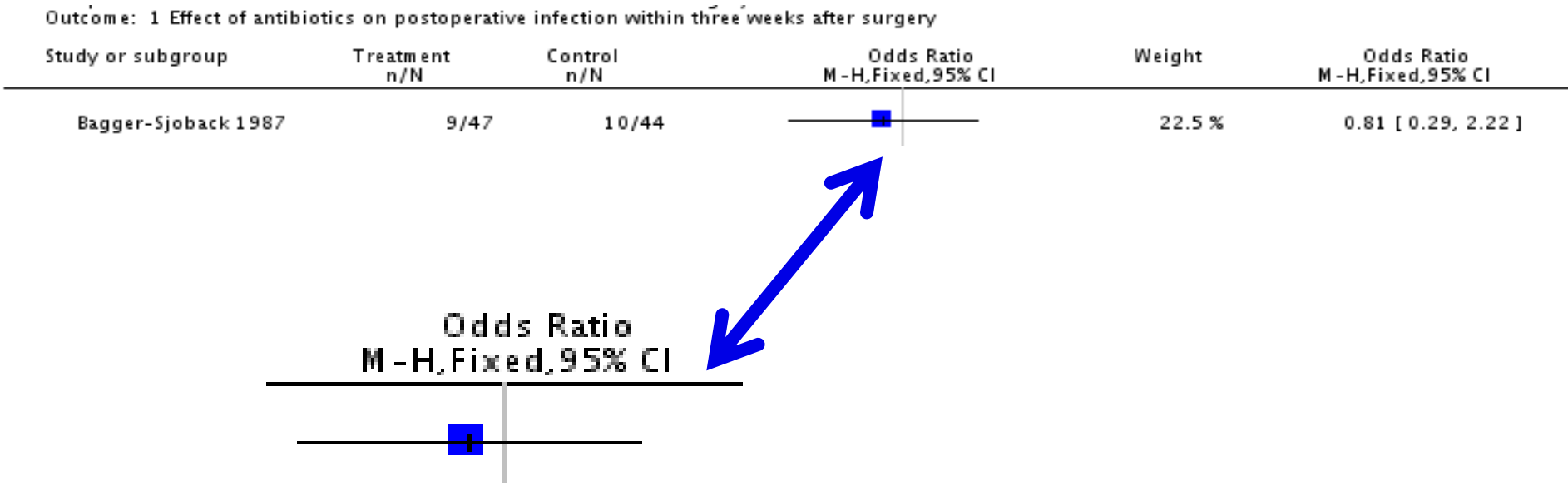
The vertical line in the middle is where the treatment and control have the same effect

Review: Antibiotic prophylaxis in clean and clean-contaminated ear surgery
Comparison: 1 Antibiotics in clean and clean-contaminated ear surgery
Outcome: 1 Effect of antibiotics on postoperative infection within three weeks after surgery



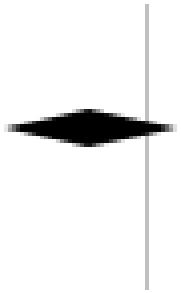


Take care to read what the labels say – things to the left do not always mean the treatment is better than the control.



- Each study is given a blob, placed where the data measure the effect.
- The size of the blob is proportional to the % weight
- The horizontal line is called a confidence interval and is a measure of how we think the result of this study might vary by chance.
- The wider the horizontal line is, the less confident we are of the observed effect.

The pooled analysis is given a diamond shape where the widest bit in the middle is located at the calculated best guess (point estimate), and the horizontal width is the confidence interval



If the confidence interval crosses the line of no effect, we have found no statistically significant difference in the effects of the two interventions

Thank you for your patience.

مقالات مروری در Cochrane Library

The Cochrane Library

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THE COCHRANE COLLABORATION®

Presentation Agenda

- Brief introduction of **Evidence-Based Medicine** theories
- **The Cochrane Collaboration** – origins, members and aim
- The Cochrane Library Databases – content of each database
- Search Tips: Using MeSH and Advanced Keywords
- Live Demonstration: **www.thecochranelibrary.com**

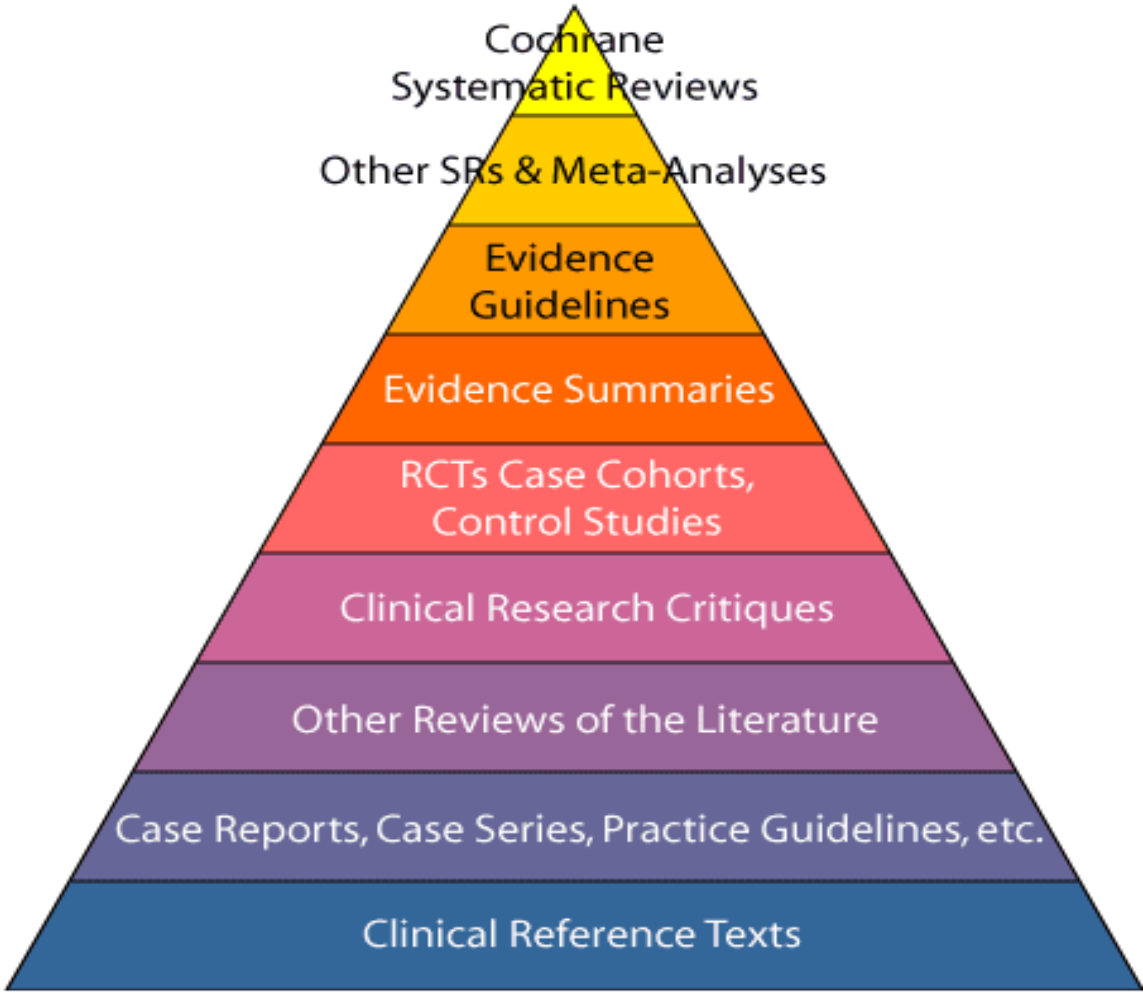
Evidence-Based Medicine

“The conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients.”

www.cebm.net

Centre for Evidence-based Medicine

Cochrane Reviews are now the "gold standard" for systematic reviews in such key publications as *The Lancet*, *New England Journal of Medicine*, *British Medical Journal*, and the *Journal of the American Medical Association* and routinely appear there as well as in specialised medical journals for various specialty areas.

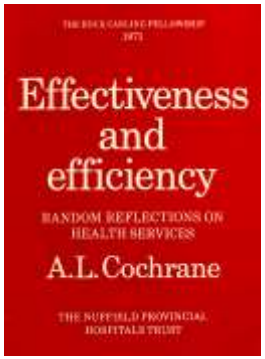


pyramid modified from: *Navigating the Maze*, University of Virginia, Health Sciences Library

FOUNDER OF THE COCHRANE COLLABORATION

The Cochrane Collaboration is named in honour of Archie Cochrane, a British medical researcher who contributed greatly to the development of epidemiology as a science.

He is best know for his influential book, *Effectiveness and Efficiency: Random Reflections on Health Services*, published in 1972.

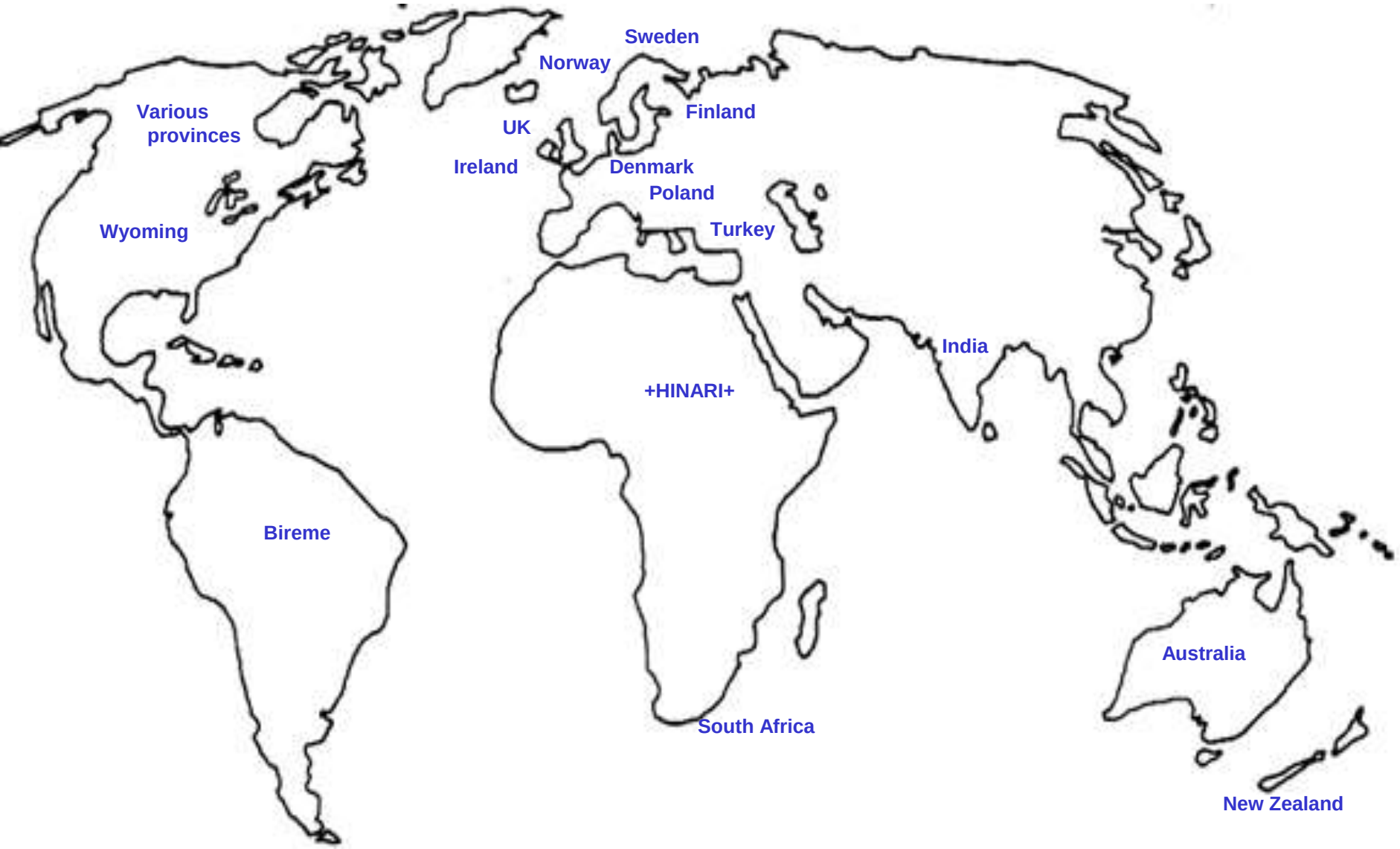


THE COCHRANE COLLABORATION

Wiley publishes The Cochrane Library for The Cochrane Collaboration

- **Structure** - established as an international organisation in 1993, registered as a charity in the UK
- **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**

National Provisions to the Cochrane Library



Who is involved in The Cochrane Collaboration?

The members of The Cochrane Collaboration are organised into groups, known as **entities**, of which there are five different types:

- Collaborative Review Groups
- Cochrane Centres
- Method Groups
- Networks or 'Fields'
- Cochrane Consumer

WHAT IS THE COCHRANE LIBRARY?

The Cochrane Library is the single most reliable source for evidence on the effects of health care.

The Cochrane Library Databases

The Cochrane Library is a collection of **6** main databases and **1** additional database that describes Cochrane as an organization.

These are:

1. **The Cochrane Database of Systematic Reviews (Cochrane Reviews)**
2. **The Cochrane Database of Reviews of Effects (Other reviews)**
3. **The Cochrane Central Register of Controlled Trials (Clinical trials)**
4. **Health Technology Assessment Database (Technology Assessments)**
5. **NHS Economic Evaluation Database (Economic Evaluations)**
6. **Methodology Register (Methods Studies)**
7. About The Cochrane Collaboration and the Cochrane Collaborative Review Groups

What is a systematic review?

A systematic review identifies an intervention for a specific disease or other problem in health care, and determines whether or not this intervention works

3,625 now online

What is a Protocol?

- the plan or set of steps to be followed in a study
- should describe the rationale for the review, the objectives, and the methods that will be used to locate, select, and critically appraise studies, and to collect and analyse data from the included studies

1,921 now online

What to consider when reading reviews:

Do the studies address a sensible clinical question?

Do the studies possess high quality designs and methods?

Are the results from the studies similar or widely different?

Are the conclusions drawn consistent with the method employed?

Are all relevant and important outcomes considered?

How do the results apply to the care of my patients?

Systematic Reviews and Protocols Process

Cochrane Review Group

Members include:

Trial Search Coordinators

Hand-Searchers, Clinicians,

Librarians and Statisticians

Register title

Prepare protocol

(3 months to one year)

Prepare review

(one to five years)

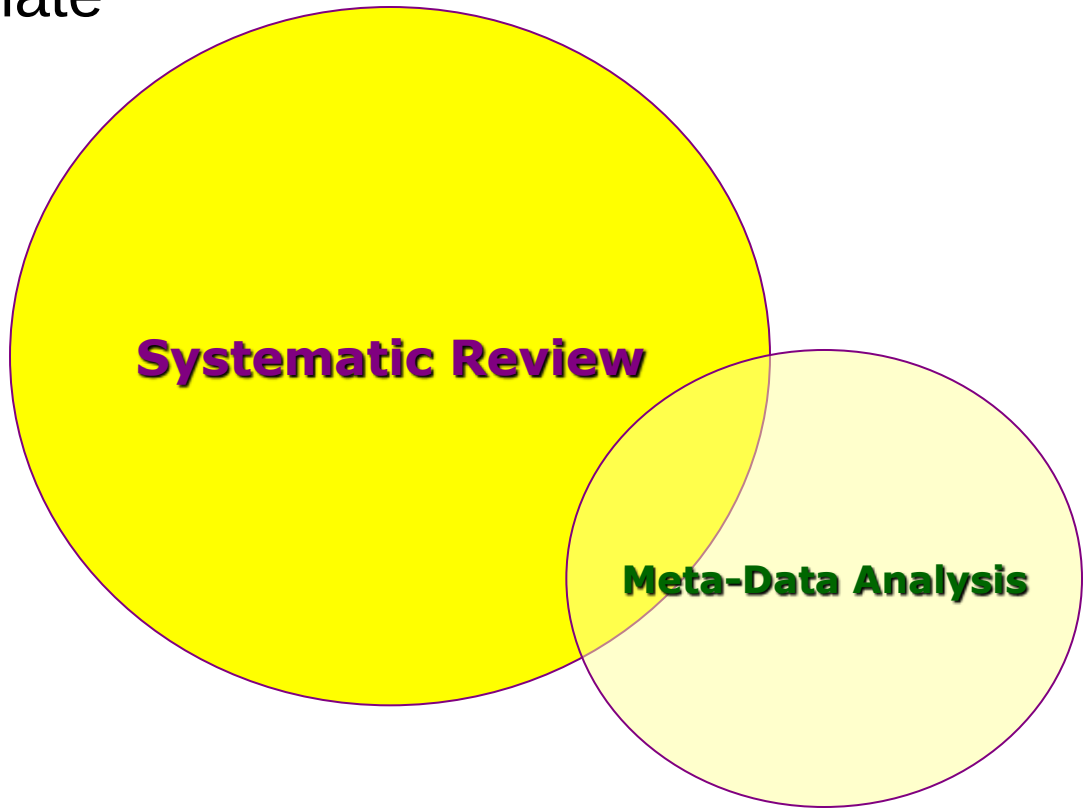
The Cochrane Library

(updated quarterly)

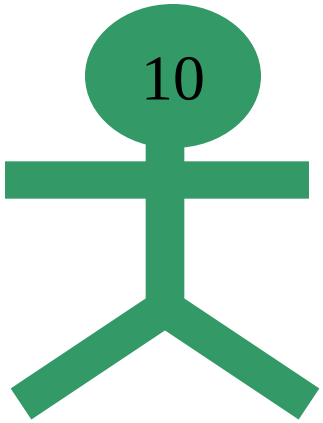
THE COCHRANE COLLABORATION®

Meta-Data Analysis

- a statistical technique for assembling the results of several studies in a review into a single numerical estimate

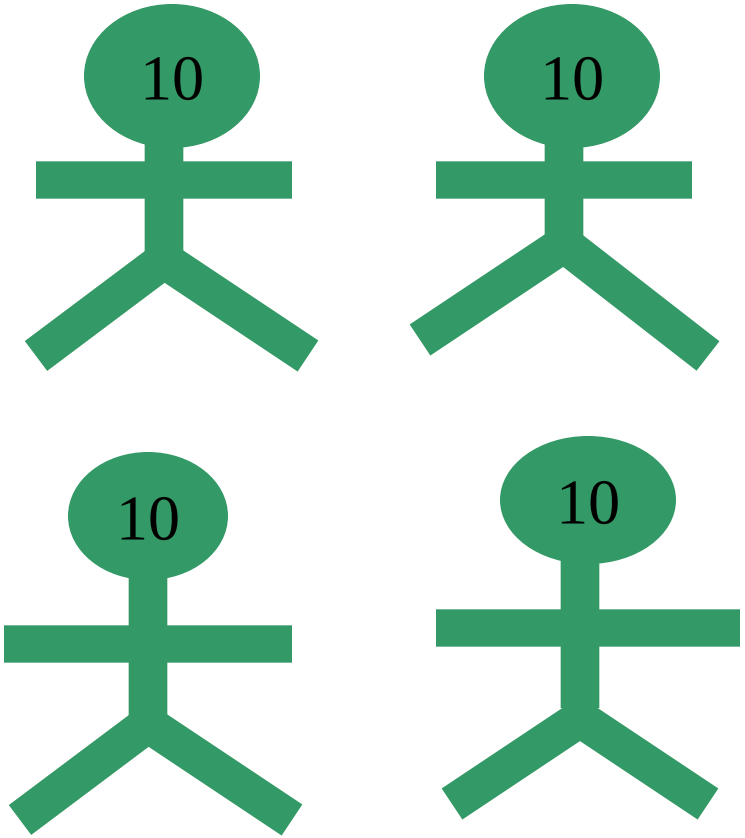


One trial -
i.e. 7 /30 people favored one treatment vs. another



Trials is conducted several times

We will evaluate similar reactions – within each trial to determine an overall estimate *NNT

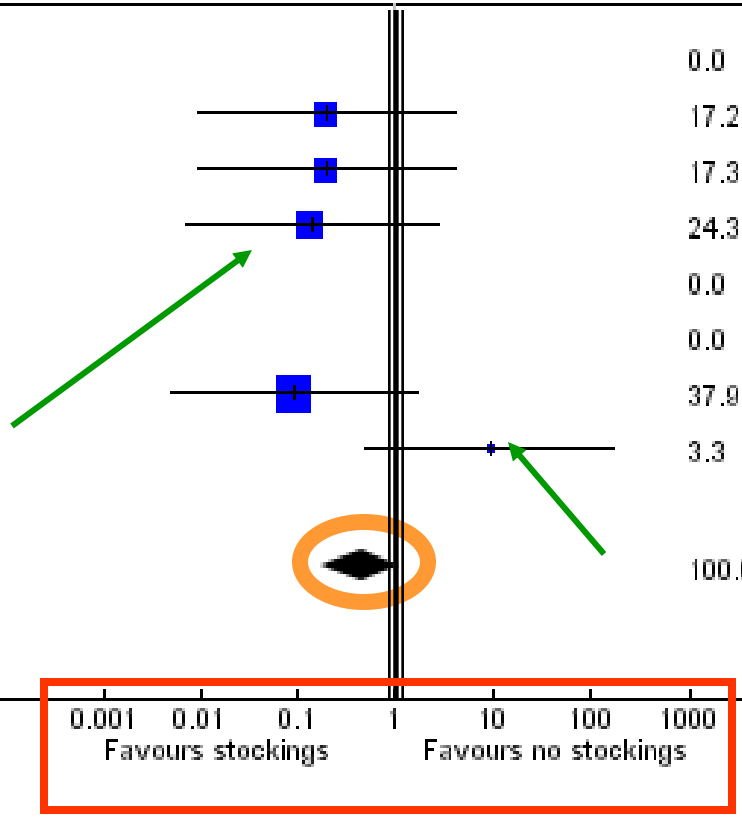


***Number Needed to Treat**
Number of patients who need to be treated to prevent one bad outcome.

Review: Compression stockings for preventing deep vein thrombosis in airline passengers
Comparison: 01 Wearing stockings versus not wearing stockings
Outcome: 02 Superficial vein thrombosis

Study	Stockings n/N	No stockings n/N	Odds Ratio (Fixed) 95% CI	Weight (%)	Odds Ratio (Fixed) 95% CI
LONFLIT 4 - Kendall1	0/72	0/72		0.0	Not estimable
LONFLIT 4 - Kendall2	0/66	2/66		17.2	0.19 [0.01, 4.12]
LONFLIT 4 - Scholl1	0/179	2/179		17.3	0.20 [0.01, 4.15]
LONFLIT 4 - Scholl2	0/136	3/135		24.3	0.14 [0.01, 2.71]
LONFLIT 4 - Traveno1	0/97	0/98		0.0	Not estimable
LONFLIT 4 - Traveno2	0/75	0/71		0.0	Not estimable
LONFLIT 5	0/178	5/180		37.9	0.09 [0.00, 1.63]
Scurr 2001	4/100	0/100		3.3	9.37 [0.50, 176.43]
Total (95% CI)	903	901		100.0	0.45 [0.18, 1.13]

Total events: 4 (Stockings), 12 (No stockings)
Test for heterogeneity chi-square=8.47 df=4 p=0.17 I^2 =38.1%
Test for overall effect z=1.70 p=0.09



Other Resources:

Cochrane Database of Reviews of Effect

(Other reviews)

- 9,000 + records
- Contains critical assessments and and structured abstracts of reviews
- Must meet minimum quality criteria
- Covers topics yet to be covered in CDSR
- For Cochrane reviewers and researchers wanting information on reviews of healthcare effects from sources outside The Cochrane Library

Cochrane Central Register of Controlled Trials

(Clinical trials)

- 550,000 records
- Contains a register of studies which may be relevant for inclusion in Cochrane reviews
- World's largest database of randomized controlled trials
- For Cochrane reviewers needing to identify studies for a Cochrane review and researchers wishing to identify studies in different medical disciplines

Other Resources:

Health Technology Assessment Database
(Technology Assessments)

- 7,000 + records
- Contains information on healthcare technology assessments, including details of ongoing projects and completed publications from health technology assessment organisations

Cochrane Methodology Register
(Methods Studies)

- 11,000 records
- A bibliography of publications that reports on methods used in the conduct of controlled trials. Including journal articles, books and conference proceedings - these articles are taken from the MEDLINE database and from hand searches.

Other Resources:

NHS Economic Evaluation Database
(Economic Evaluations)

- 24,000 + records
- Contains structured abstracts of articles describing economic evaluations of health care interventions.
- Articles are identified by searching key medical journals, bibliographic databases and less widely available literature.
- Papers are included if they provide a comparison of treatments and examine both the costs and outcomes of the alternatives.

MeSH and Advanced Keywords

What is MeSH?

The Medical Subject Heading (MeSH) search is based on the National Library of Medicine's controlled vocabulary thesaurus of medical subject headings.

http://www.nlm.nih.gov/mesh/introduction2004.html

MeSH Tree Structure

Each Descriptor has a tree number that positions the term in the hierarchy.

Eye [A01.456.505.420]

Eyebrows [A01.456.505.420.338]

Eyelids [A01.456.505.420.504]

Eyelashes [A01.456.505.420.504.421.]

Remember when search MeSH – some terms have MULTIPLE tree numbers because they appear in more than one place in the hierarchy!

For example: nose may be under face OR respiratory or sensory

MeSH

MeSH terms in Cochrane:

Cochrane Reviews:	Fully indexed, except for Reviews first published in recent issues
Cochrane Protocols:	No MeSH indexing
Clinical Trials:	Only reviews taken from Medline
Other reviews:	Fully indexed
Technology assessments:	Fully indexed
Economic Evaluations:	Fully indexed

Advanced Search: Using Keywords

Boolean logic tips:

- **Diabetes AND pregnancy** – you want records specifically about diabetes in pregnant women. Both terms must appear in every record.

- **Adolescent OR teenager** – you want records relating to either adolescents or teenagers. It doesn't matter which term appears in the record.

- **Vaccine NOT MMR** – you are interested in vaccines, but want to exclude records about the MMR. Records mentioning the MMR will not appear in your results.

Need help using the Cochrane Library?

- Instructor-led tutorials:
  www.interscience.wiley.com/training

- Teach yourself tutorials:
  www.interscience.wiley.com/tutorials

The Cochrane Library is brought to you online by Wiley InterScience. If would like to learn more about any of our other products, please go to:

interscience.wiley.com/training

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