Evidence-Based Practice for K-12 Health Professionals

Lydia N Collins
Consumer Health Coordinator
lydia@pitt.edu

NN/LM National Network of Libraries of Medicine
Middle Atlantic Region

Agenda

- Levels of Evidence
- Study Design
- The PICO Question
- Evidence-Based Resources
- Assessing the Evidence

Introduction to Evidence-Based Resources

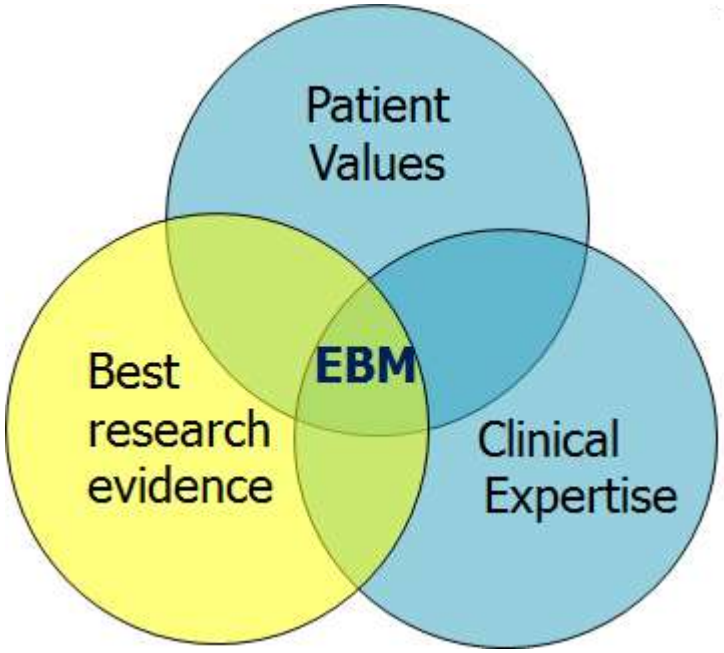
Some Studies That I Like To Quote

URL for Source (James McCormack)

Definition - EBM

Evidence-based medicine requires the integration of the best research evidence with our clinical expertise and our patient's unique values and circumstances.

Straus SE, Richardson WS, Glasziou P, Haynes RB. *Evidence-based medicine: how to practice and teach EBM* 3d ed. London: Churchill Livingstone, 2005



Definition - EBP

Evidence-Based Practice: A way of providing health care that is guided by a thoughtful integration of the best available scientific knowledge with clinical expertise.

This approach allows the practitioner to critically assess research data, clinical guidelines, and other information resources in order to correctly identify the clinical problem, apply the most high-quality intervention, and re-evaluate the outcome for future improvement.

NLM MeSH 2009

Steps in Evidence Based Research

1. **Asking answerable questions**
2. **Finding the best evidence**
3. Critically appraising the evidence
4. Applying a decision
5. Evaluation

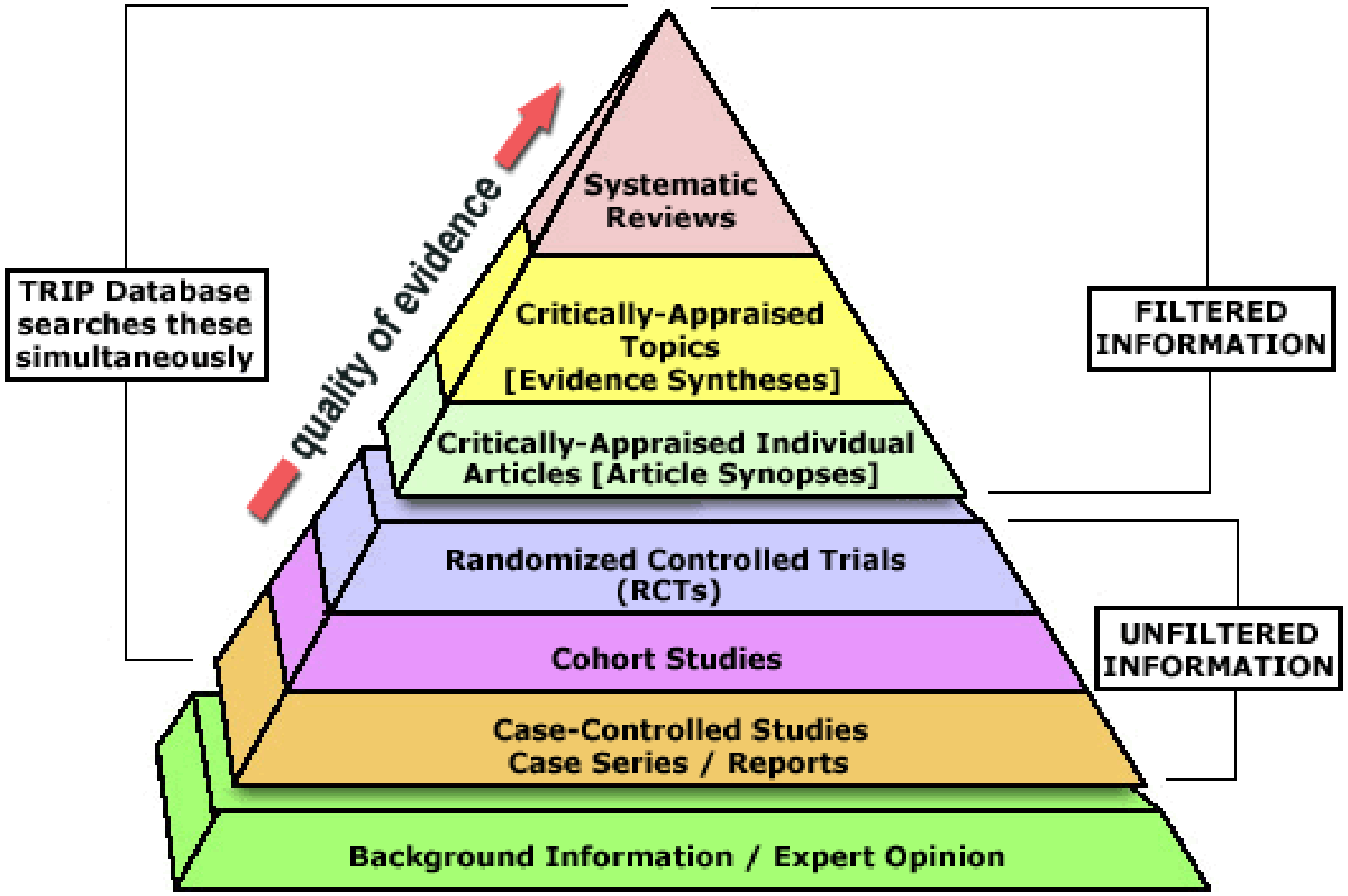
Heneghan C, Badenoch D. *Evidence-based medicine toolkit.* 2d ed. Malden, MA: Blackwell, 2007

There is a lot of Research!

- Over 24 million citations in PubMed
- Added in 2012: 777,559
- Smoking cessation: **29774**
- Asthma: **148345**
- Diabetes: **497871**

Levels of Evidence

Levels of Evidence



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URL for Image Source

Types of Studies

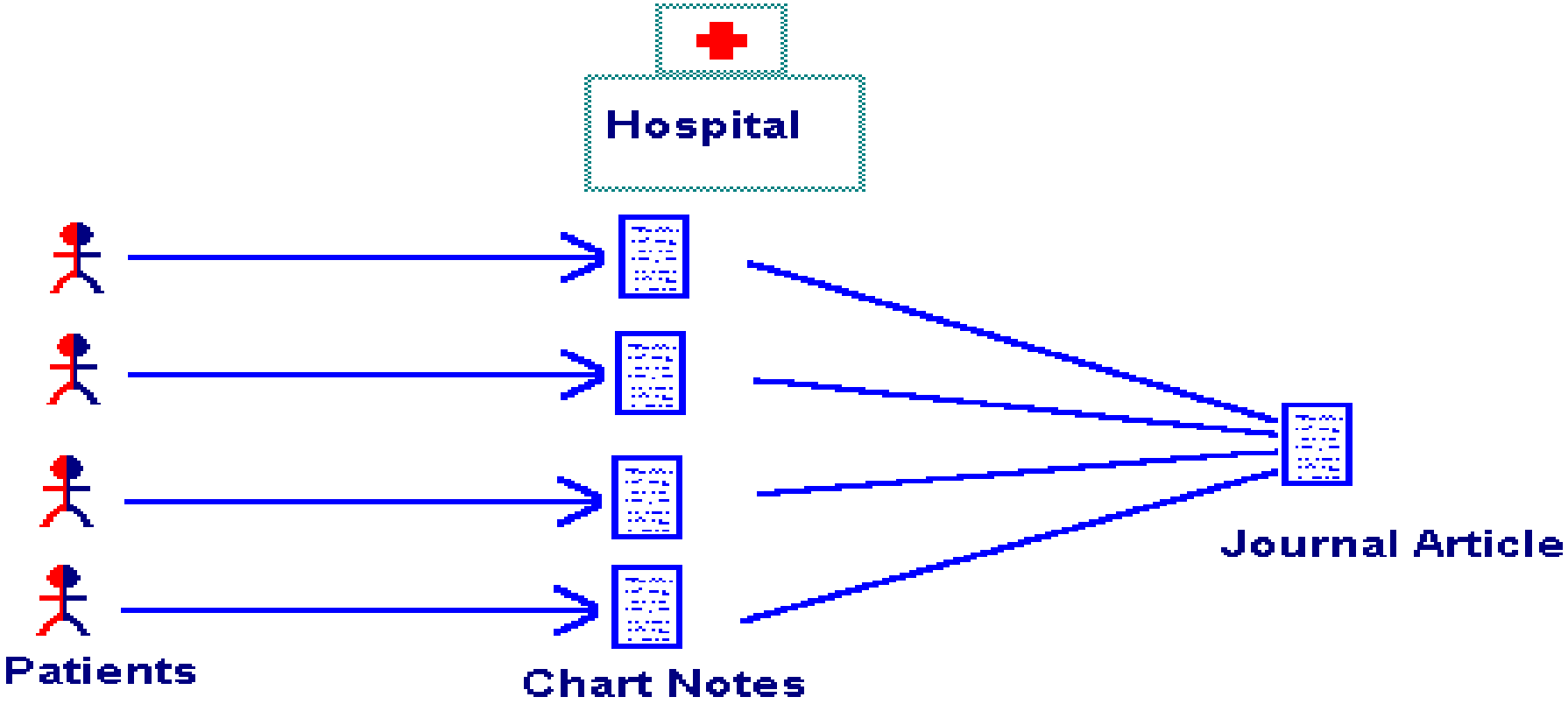
- Case Series and Case Reports
- Case Control Studies
- Cohort Studies
- Randomized, Controlled Clinical Trials
- Systematic Reviews
- Meta-analysis

Study Design

Case Series and Case Reports

- Collections of reports on the treatment of individual patients or a report on a single patient.
- No control groups with which to compare outcomes, so limited statistical validity.

Case Series



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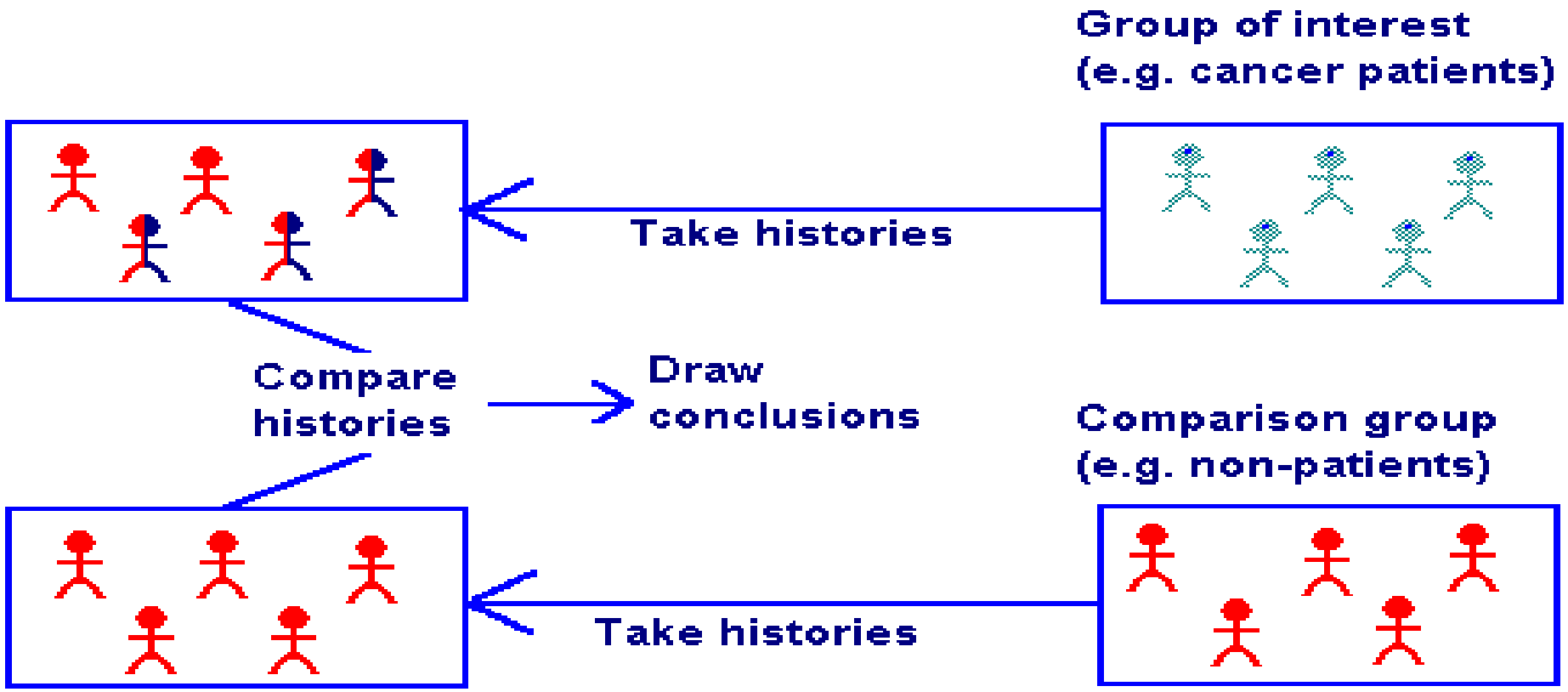
Case Control Studies

- Patients who already have a specific condition are compared with people without the condition. Researcher looks back to identify factors or exposures possibly associated with the condition, often relying on medical records and patient recall.
- Less reliable because showing a statistical relationship does not mean than one factor necessarily caused the other.
- **Starts with patients who already have the outcome and looks backwards to possible exposures.**

Case Control Series



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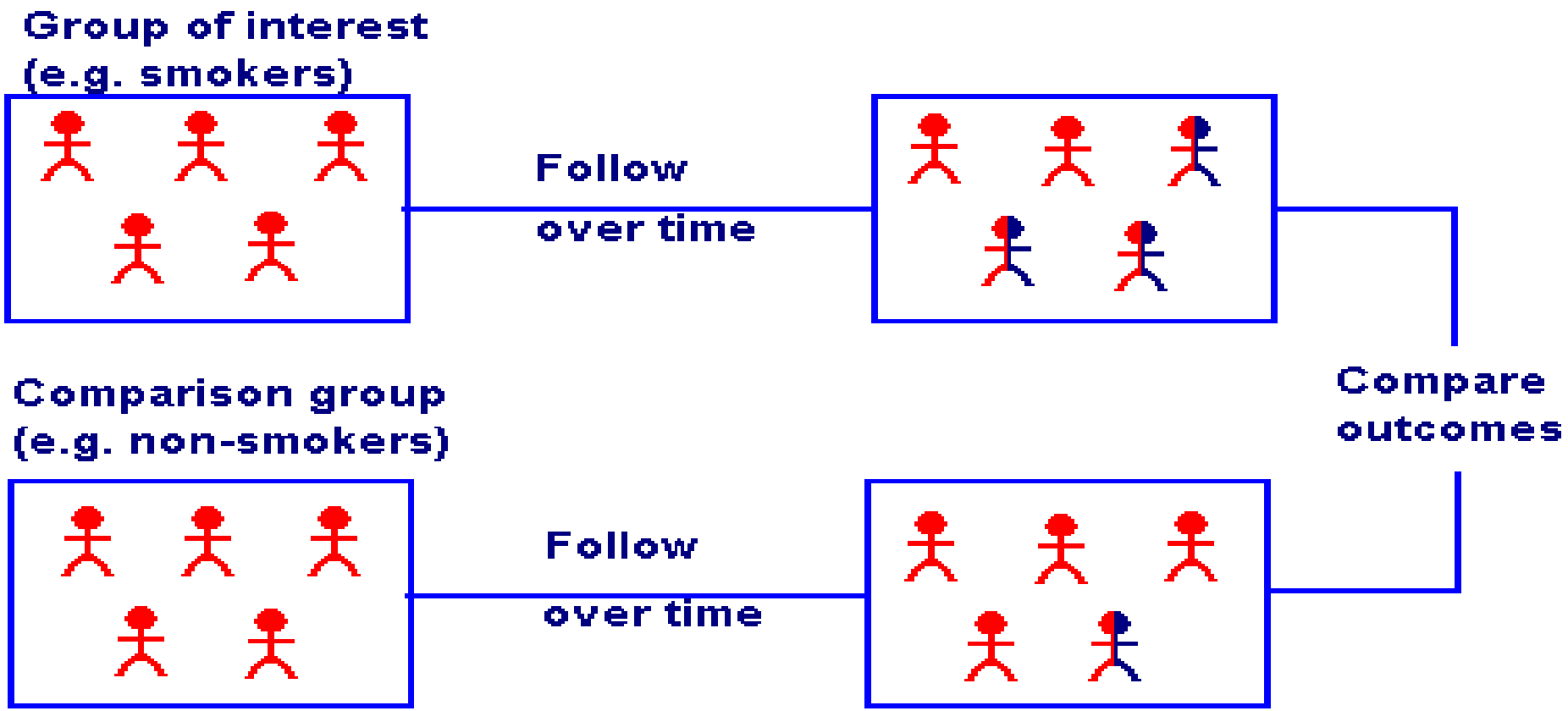
Cohort Studies

- Take a large population who are already taking a particular treatment or have an exposure, follow them forward over time, and then compare for outcomes with a similar group that has not been affected by the treatment or exposure.
- Observational and not as reliable as randomized controlled studies, since the two groups may differ in ways other than in the variable under study.
- **Starts with the exposure and follows patients forward to an outcome.**

Cohort Studies: Diagram



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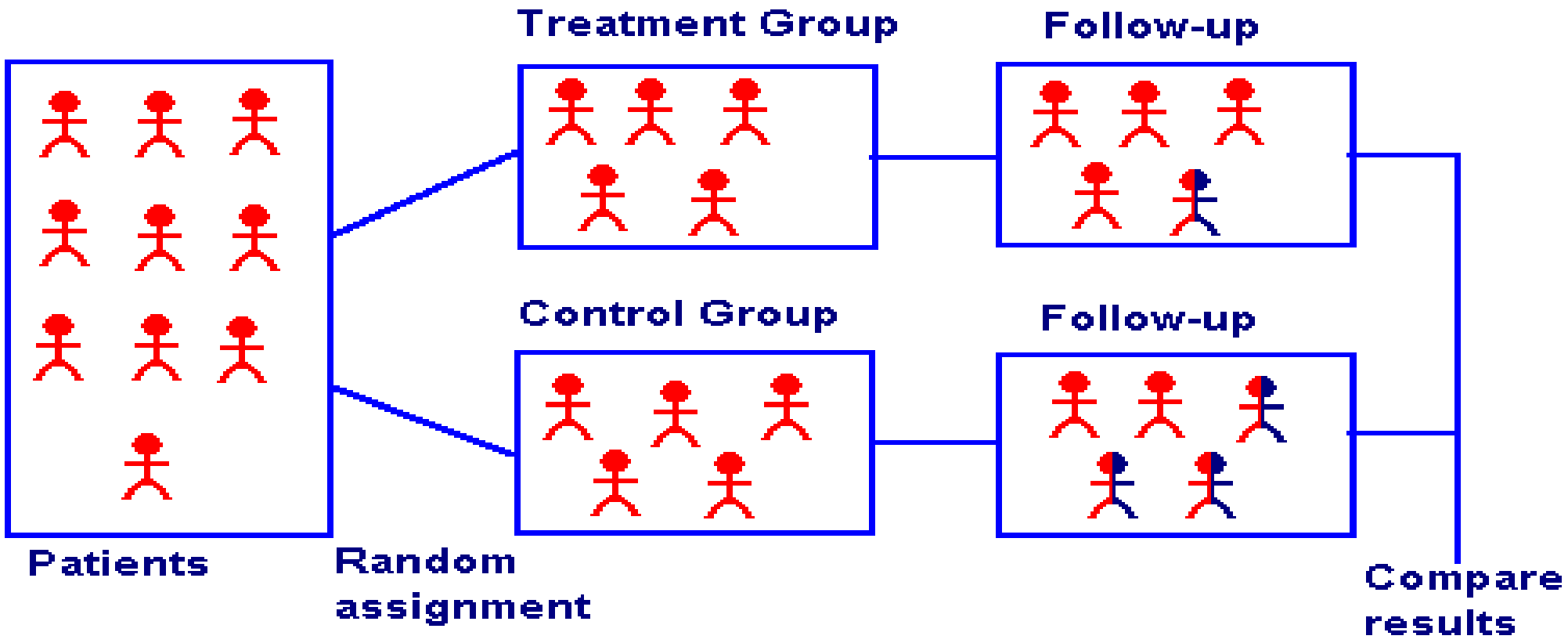
Randomized, Controlled Clinical Trials

- Carefully planned projects that introduce a treatment or exposure to study its effect on patients.
- Include methodologies that reduce the potential for bias (randomization and blinding) and allow for comparison between intervention and control groups.
- Is an experiment and can provide sound evidence of cause and effect.
- **Randomly assigns exposures and then follows patients forward to an outcome.**

RCTs



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Systematic Reviews

- Usually focus on a clinical topic and answer a specific question. An extensive literature search is conducted to identify studies with sound methodology. The studies are reviewed, assessed, and the results summarized according to the predetermined criteria of the review question.

Meta-analysis

- Thoroughly examines a number of valid studies on a topic and combines the results using accepted statistical methodology to report the results as if it were one large study.
- The Cochrane Collaboration has done a lot of work in the areas of systematic reviews and meta-analysis.

Creating the Well-Built, Answerable Question

PICO

The 5 A's

ASSESS the patient	1. Start with the patient -- a clinical problem or question arises from the care of the patient
ASK the question	2. Construct a well built clinical question derived from the case
ACQUIRE the evidence	3. Select the appropriate resource(s) and conduct a search
APPRAISE the evidence	4. Appraise that evidence for its validity (closeness to the truth) and applicability (usefulness in clinical practice)
APPLY: talk with the patient	5. Return to the patient -- integrate that evidence with clinical expertise, patient preferences and apply it to practice
Self-evaluation	6. Evaluate your performance with this patient

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Assess, Ask & Form the ?

Assess and Ask

Forming the Clinical Question

- Identify key patient problem
- Phrased to facilitate finding an answer
- What treatment might be considered?
- Alternative treatments to consider
- Outcome to avoid or promote

Appraise & Apply

- Appraise information for validity
- Apply :
  - Talk to patient
  - Integrate evidence into clinical practice, patient preference, and apply

Critical Appraisal Questions

- Are the results of the study valid?
- What were the results?
- Will the results help me in caring for my patients?

Critical Appraisal Worksheets

KTCH Home | KT Canada | Knowledge Base | Centre for Evidence-Based Medicine | KT Tools | Consultation Service | KT Trainee Collaborative | Community Forum

centre for
Evidence-Based Medicine
TORONTO

KT Clearinghouse > Centre for Evidence-Based Medicine > Practising EBM > Critical Appraisal of Evidence > Critial Appraisal Worksheets

This content is mirrored from: http://ktclearinghouse.ca/cebm/teaching/worksheets

- Main
  - Introduction to EBM
  - Practising EBM
    - Formulating Answerable Clinical Questions
    - Searching for the Best Evidence

Critical appraisal worksheets

- Diagnosis worksheet
- Harm worksheet
- Prognosis worksheet
- Systematic review (of therapy) worksheet
- Therapy worksheet

URL for Knowledge Translation Clearinghouse

And PICO was HIS Name-O!

PICO

P= Patient or problem

I = Intervention, prognostic factor, or exposure

C=Comparison

O=Outcomes

(T)=Time

Intervention/Therapy

In _____ (P),

How does _____ (I)

Compared to _____ (C)

Affect _____(O)

Within _____(T)?

Source: Stillwell SB, Fineout-Overholt E, Melnyk BM, Williamson KM. Evidence-based practice, step by step: asking the clinical question: a key step in evidence-based practice. Am J Nurs. 2010 Mar;110(3):58-61.

Etiology

Are _____ (P)

Who have _____(I)

Compared with those without _____ (C)

At _____ risk for _____ (O)

Over _____(T)?

Source: Stillwell SB, Fineout-Overholt E, Melnyk BM, Williamson KM. Evidence-based practice, step by step: asking the clinical question: a key step in evidence-based practice. Am J Nurs. 2010 Mar;110(3):58-61.

Diagnosis

In _____(P),

Are/is _____(I)

Compared with _____(C)

More accurate in diagnosing _____(O)?

Source: Stillwell SB, Fineout-Overholt E, Melnyk BM, Williamson KM. Evidence-based practice, step by step: asking the clinical question: a key step in evidence-based practice. Am J Nurs. 2010 Mar;110(3):58-61.

Identifying the Best Study

Type of Question	Suggested best type of Study
Therapy	RCT>cohort > case control > case series
Diagnosis	Prospective, blind comparison to a gold standard
Etiology/Harm	RCT > cohort > case control > case series
Prognosis	Cohort study > case control > case series
Prevention	RCT>cohort study > case control > case series
Clinical Exam	Prospective, blind comparison to gold standard
Cost	Economic analysis

Source: *Introduction to Evidence Based Medicine*. Chapel Hill, NC: Health Sciences Library, UNC-Chapel Hill. 2004.

Let's Try it!

Jane brings her three-year-old son in to the emergency room. She says that her son has been having frequent fevers, which she has judged by feeling his forehead. Because she hasn't been using a thermometer, you wonder if she could have accurately determined if he had a fever.

What Kind of Question is it?

Therapy
Etiology
Diagnosis

URL for worksheet

Diagnosis Template

- In _____(P),
- Are/is _____(I)
- Compared with _____(C)
- More accurate in diagnosing _____(O)?

REMEMBER PICO

P= Patient or problem

I = Intervention, prognostic factor, or exposure

C=Comparison

O=Outcomes

(T)=Time

Questions

Resources for EBP

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NLM

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- Clinical effectiveness research
- Summaries for practitioners and consumers
- Systematic Reviews

URL for PubMed Health

Abstracts from DARE

Database of Abstracts of Reviews of Effects (DARE): Quality-assessed Reviews [Internet].

G+1

A meta-analytic review of obesity prevention in the schools: 1997-2008

C Cook-Cottone, CM Casey, TH Feeley, and J Baran.

Review published: 2009.

Link to full article: [Journal publisher]

CRD summary

This review concluded that school-based obesity prevention programmes resulted in small improvements in body mass index and that much more work is required to establish best practice for obesity prevention in schools. The review had some limitations, but overall the conclusions seem reasonable and appropriately cautious.

Authors' objectives

To examine the research conducted over a 10-year period on school-based interventions to reduce obesity in children.

Searching

PsycINFO, MEDLINE, CINAHL, Academic Search Premier and Cochrane Database of Systematic Reviews were searched for English-language articles published between January 1997 and July 2008. Reference lists of retrieved articles were searched.

Study selection

Randomised and nonrandomised trials of school-based obesity prevention programmes targeted at children who were normal weight, overweight or at risk for being overweight were eligible for inclusion. Studies needed to report an objective anthropometric outcome measure such as body mass index (BMI) or skinfold thickness. An obesity prevention programme was defined as aiming to decrease cardiovascular risk factors for obesity, increase physical activity or decrease sedentary behaviours. Studies of eating disorder programmes were excluded.

Included studies were diverse and included children from elementary, middle and high school age groups (four to 18 years approximately). Programmes varied in intensity, duration, content, who delivered the intervention and in the extent of parental involvement as well as other characteristics. The main outcome of interest in the review was BMI or BMI Z score.

The authors did not state how the papers were selected for the review.

URL for Sample DARE Review

Plain Language Summaries (Cochrane Collaboration)

Cochrane Database of Systematic Reviews: Plain Language Summaries [Internet].

G+1

Atypical antipsychotic drugs for disruptive behaviour disorders in children and youths

This version published: 2012; Review content assessed as up-to-date: February 15, 2012.

Link to full article: [Cochrane Library]

Plain language summary

Children and young people with disruptive behaviour disorders often present with aggression and severe behaviour problems. These can result in families seeking psychiatric services, where a number of medications, including atypical antipsychotics, may be used to reduce these symptoms. There is evidence that the use of atypical antipsychotics for disruptive behaviour disorders in youths is on the increase. We searched for clinical studies of atypical antipsychotics used for disruptive behaviour disorders in children and young people to evaluate whether these medications are effective and safe. We found eight studies. Seven of these studies investigated the efficacy of risperidone and one study used quetiapine. The analysis suggested that risperidone led to a reduction of aggression and conduct problems to some extent after six weeks of treatment and that the medication appeared safe during the study period. Use of medication, however, was associated with significant weight gain. The findings need to be considered with caution because of the limitations of the evidence. For example, the studies measured and reported different outcome measures, which limited our ability to combine the findings, and there were no studies with children under the age of five years. We recommend that more research is carried out in this field to find out the long-term efficacy and safety of these medications in treating disruptive behaviour disorders in children and youths.

Abstract

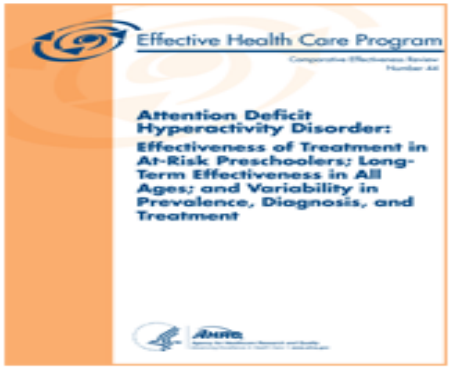
Background: Disruptive behaviour disorders include conduct disorder, oppositional defiant disorder and disruptive behaviour not otherwise specified. Attention deficit hyperactivity disorder (ADHD) is frequently associated with disruptive behaviour disorders. The difficulties associated with disruptive behaviour disorders are demonstrated through aggression and severe behavioural problems. These often result in presentation to psychiatric services and may be treated with medications such as atypical antipsychotics. There is increasing evidence of a significant rise in the use of atypical antipsychotics for treating disruptive behaviour disorders in child and adolescent populations.

Objectives: To evaluate the effect and safety of atypical antipsychotics, compared to placebo, for treating disruptive behaviour disorders in children and youths.

URL for Sample Cochrane Summary

Public Agency Reviews

Home > Full Text Reviews > Attention Deficit Hyperactivity...



Attention Deficit Hyperactivity Disorder

G+1

Effectiveness of Treatment in At-Risk Preschoolers; Long-Term Effectiveness in All Ages; and Variability in Prevalence, Diagnosis, and Treatment

Comparative Effectiveness Reviews, No. 44

Investigators: Alice Charach, MD, MSc, FRCP(C), Behnoosh Dashti, MD, MPH, Patricia Carson, BSc(H), BEd, Lynda Booker, BA, Choon Guan Lim, MBBS, MMED (Psychiatry), Erin Lillie, BSc (H), MSc, Emanuela Yeung, BSc (H), Jinhui Ma, MSc, Parminder Raina, BSc, PhD, and Russell Schachar, MD, FRCP(C).

McMaster University Evidence-based Practice Center

Rockville (MD): Agency for Healthcare Research and Quality (US); 2011 Oct.
Report No.: 12-EHC003-EF

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Structured Abstract

Objectives: (1) Compare effectiveness and adverse events of interventions (pharmacological, psychosocial, or behavioral, and the combination of pharmacological and psychosocial or behavioral interventions) for preschoolers at high risk for attention deficit hyperactivity disorder (ADHD); (2) compare long-term effectiveness and adverse events of interventions for ADHD among persons of all ages; and (3) describe how identification and treatment for ADHD vary by geography, time period, provider type, and sociodemographic characteristics, compared with endemic prevalence.

Data Sources: MEDLINE®, Cochrane CENTRAL, EMBASE, PsycInfo, and ERIC (Education Resources Information Center) were searched from 1980 to May 31, 2010. Reference lists of included studies and gray literature were searched manually.

Review Methods: Reviewers applied preset criteria to screen all citations. Decisions required agreement between two independent reviewers, with disagreements regarding inclusion or exclusion resolved by a third. The Effective Public Health Practice Project (EPHPP) process was used to evaluate internal validity of publications regarding interventions for preschoolers at high risk of ADHD and long-term outcomes following interventions for ADHD in persons of all ages. Overall strength of the evidence (SOE) was assessed using the GRADE approach, accounting for risk of bias and study design, consistency of results, directness of evidence, and degree of certainty regarding outcomes of interest.

URL for Sample Public Agency Review

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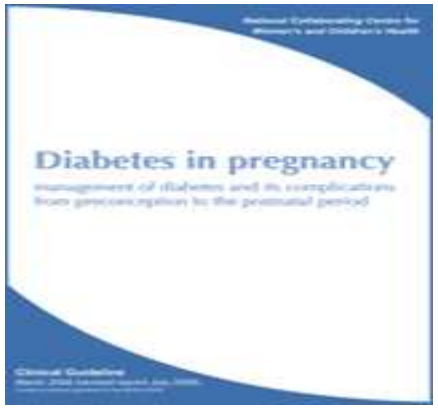
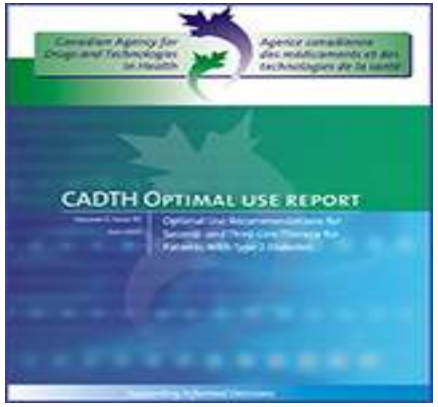
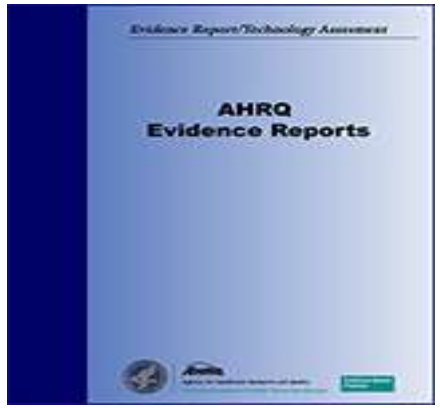
- Clinical Guides
- Full text Reviews
- Methods Sources
- Drugs A-Z

Sources







- Cochrane Collaboration-Plain Language Summaries
- National Institute for Health and Care Excellence (NICE) (UK)
- Agency for Healthcare Research and Quality (US)
- National Cancer Institute-PDQ (Physician Data Query)
- Dept. of Veterans Affairs-Evidence-based Synthesis Program
- Canadian Agency for Drugs and Technologies in Health.

PubMed Health | PubMed Health | antibiotics whooping cough | Search

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Systematic reviews
Clinician information

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Antibiotics for **whooping cough** (pertussis)

Whooping cough is a highly contagious disease caused by pertussis bacteria and may lead to death, particularly in infants less than 12 months of age. Although it can be

Cochrane Database of Systematic Reviews: Plain Language Summaries [Internet] - John Wiley & Sons, Ltd.

Version: 2013

Treatment of the **cough** in **whooping cough**

We reviewed the evidence from 12 studies about the effect of treatments for **cough** in patients with **whooping cough**.

Cochrane Database of Systematic Reviews: Plain Language Summaries [Internet] - John Wiley & Sons, Ltd.

Version: 2014

Respiratory Tract Infections - Antibiotic Prescribing: Prescribing of **Antibiotics** for Self-Limiting Respiratory Tract Infections in Adults and Children in Primary Care

Respiratory tract infection (RTI) is defined as any infectious disease of the upper or lower respiratory tract. Upper respiratory tract infections (URTIs) include the common cold,

NICE Clinical Guidelines - National Institute for Health and Clinical Excellence (UK).

Version: July 2008

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Systematic Reviews in PubMed

Symptomatic treatment of the cough in whooping cough. [Cochrane Database Syst Rev. 2014]

Symptomatic treatment of the cough in whooping cough. [Cochrane Database Syst Rev. 2012]

Symptomatic treatment of the cough in whooping cough. [Cochrane Database Syst Rev. 2010]

Pertussis in adulthood: report of two cases and review of the literature. [Laryngoscope. 2009]

WITHDRAWN: Symptomatic treatment of the cough in whooping cough. [Cochrane Database Syst Rev. 2008]

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Sample PubMed Search for Pertussis

PubMed Health | PubMed Health | school based obesity prevention | Search

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- Systematic reviews with

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Interventions for the **Prevention** or Management of Childhood **Obesity**: A Review of the Clinical Evidence [Internet]

Over 30% of children and youth in Canada are considered overweight or obese. **Obesity** is caused by long-term energy imbalances, whereby daily energy intake exceeds daily

Rapid Response Report: Summary with Critical Appraisal - Canadian Agency for Drugs and Technologies in Health.

Version: December 13, 2013

Show search results within this document

Childhood **Obesity Prevention** Programs: Comparative Effectiveness Review and Meta-Analysis [Internet]

Childhood **obesity** is a serious health problem in the United States and worldwide. More than 30 percent of American children and adolescents are overweight or obese. We

Comparative Effectiveness Reviews - Agency for Healthcare Research and Quality (US).

Version: June 2013

Show search results within this document

Interventions for preventing **obesity** in children

Childhood **obesity** can cause social, psychological and health problems, and is linked to **obesity** later in life and poor health outcomes as an adult. **Obesity** development is

Cochrane Database of Systematic Reviews: Plain Language Summaries [Internet] - John Wiley & Sons, Ltd.

Version: 2013

Save search

Save search as RSS

Systematic Reviews in PubMed

Clinical Impact of Alcohol-Related Cirrhosis in the Next Decade: Estimates Based on C [Alcohol Clin Exp Res. 2015]

Healthy urban environments for children and young people: A systematic review of intervention studies [Health Place. 2015]

Is consuming yoghurt associated with weight management outcomes? Results from a systema [Int J Obes (Lond). 2015]

Systematic literature review of determinants of sedentary behaviour in older adults: a [Int J Behav Nutr Phys Act. 2015]

Socioeconomic inequalities in non-communicable diseases and their risk factors: an overview [BMC Public Health. 2015]

See all (367)...

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Sample Search on School Based Obesity Prevention

Caution

- Searching functionality needs work
- Expect enhancements over time
- Be as specific as possible-use words such as Prevention, Screening, Treatment, Management

PubMed Health

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NGC is a public resource for evidence-based clinical practice guidelines.

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New This Week

October 26, 2015

Guideline Summaries

- New/Updated American Urological Association Education and Research, Inc.
- New National Institute for Health and Care Excellence (NICE)
- New Registered Nurses' Association of Ontario
- New Scottish Intercollegiate Guidelines Network

View All

Announcements

Conference News

- The **8th Annual Conference on the Science of Dissemination and Implementation** will take place from December 14-15, 2015 in Washington DC. The theme is "Optimizing Personal and Population Health." Early registration deadline is **October 30, 2015**. Visit the conference home page for more information.

More...

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- Search evidence-based guidelines from a variety of sources
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Advanced Search

Select topics within the lists below to create a targeted search of summaries. As you make your selections, the number of available results will automatically update.

Specify a keyword:

Search indexing keywords only:

- [ ] Disease or Condition
- [ ] Treatment or Intervention
- [ ] Health Services Administration

Filter by:

- [ ] U.S.-based organizations only

Make selections to target your search

Clear all selections

Age of Target Population:

- [ ] Adolescent (13 to 18 years)
- [ ] Adult (19 to 44 years)
- [ ] Aged (65 to 79 years)
- [ ] Aged, 80 and over
- [ ] Child (2 to 12 years)

Methods Used to Assess the Quality and Strength of the Evidence:

- [ ] Expert Consensus
- [ ] Expert Consensus (Committee)
- [ ] Expert Consensus (Delphi Method)
- [ ] Subjective Review
- [ ] Weighting According to a Rating Scheme (Scheme

Clinical Specialty:

- [ ] Allergy and Immunology
- [ ] Anesthesiology
- [ ] Cardiology
- [ ] Chiropractic
- [ ] Colon and Rectal Surgery

Publication Year:

- [ ] 2014
- [ ] 2013
- [ ] 2012
- [ ] 2011
- [ ] 2010

Compare Guidelines

Generate side-by-side comparisons for any combination of two or more guidelines. For optimal readability, we recommend comparing **no more than three** guidelines at once.

The guidelines collected are retained throughout your session, so you may compare guidelines from multiple searches and browses. However, closing your browser will clear all collected guidelines. For more information on which guideline attributes are compared, see the Guideline Comparison Template.

Select all | Deselect all

Compare Delete

- [ ] **Screening for suicide risk in adolescents, adults, and older adults in primary care: U.S. Preventive Services Task Force recommendation statement.** 1996 (revised 2014 May 20). NGC:010398
  U.S. Preventive Services Task Force - Independent Expert Panel.
- [ ] **Routine preventive services for children and adolescents (ages 2-21).** 2007 May (revised 2013 May). NGC:009931
  Michigan Quality Improvement Consortium - Professional Association.
- [ ] **Clinical practice guidelines: depression in adolescents and young adults.** 2011 Feb. NGC:009655
  beyondblue: the national depression initiative - Nonprofit Organization.

Compare Delete

My NGC

Save favorite summaries and organizations by browsing the site. Create custom e-mail alerts by selecting content or topics of interest.

Note: E-mail alerts are issued weekly. You will only receive an e-mail if your specific content has changed (i.e., summaries are published, updated, or withdrawn).

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An e-mail alert will be sent when new/updated guideline summaries are published in any of the following:

- Falls and Fall Prevention
- Osteoporosis

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You do not have any favorite guideline summaries.

NOTE: To save a favorite guideline summary, search or browse to find the desired guideline, and click 'Save to Favorites' on the upper right of the page.

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To receive an alert when a favorite organization publishes, updates, or withdraws a guideline summary, click 'Add to E-mail Alert'.

American Academy of Family Physicians Delete

x Remove E-mail Alert

American Geriatrics Society Delete

x Remove E-mail Alert

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Announcements

- Final Research Plan: Screening for Dyslipidemia in Children and Adolescents *1/16/2015*
- USPSTF Announces Appointments of New Vice Chair and Member *1/12/2015*
- Public Comment on Draft Research Plan: Screening for Thyroid Cancer *1/8/2015*

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URL for U.S. Preventive Task Force

The Guide to Community Preventive Services
THE COMMUNITY GUIDE
What Works to Promote Health

Community Preventive Services Task Force

Search

Home | Task Force Findings | Topics | Use The Community Guide | Methods | Resources | News | About Us

Text Size: S M L XL

Want to know what combination of interventions increase vaccination rates?

See two new Community Preventive Services Task Force recommendations on this topic.

1 2 3 4

Task Force

2015 Meetings
October 28–29

2016 Meetings

Annual Reports to Congress

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What's this?

Topics

Adolescent Health
Alcohol - Excessive Consumption
Diabetes
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Motor Vehicle Injury
Nutrition
Social Environment
Tobacco

URL for The Community Guide

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PubMed

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Using PubMed	PubMed Tools	More Resources
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Full Text Articles	Single Citation Matcher	Journals in NCBI Databases
PubMed FAQs	Batch Citation Matcher	Clinical Trials
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New and Noteworthy	Topic-Specific Queries	LinkOut

Major Content Areas

- Biomedical Sciences
- Nursing, Dentistry, Pharmacy and Allied Health
- Veterinary Medicine
- Preclinical sciences

URL for PubMed

Home | Overview | 1. ASK | 2. ACQUIRE | 3. APPRAISE | APPRAISE - Diagnosis | Practice | More Info | Feedback

Searching PubMed

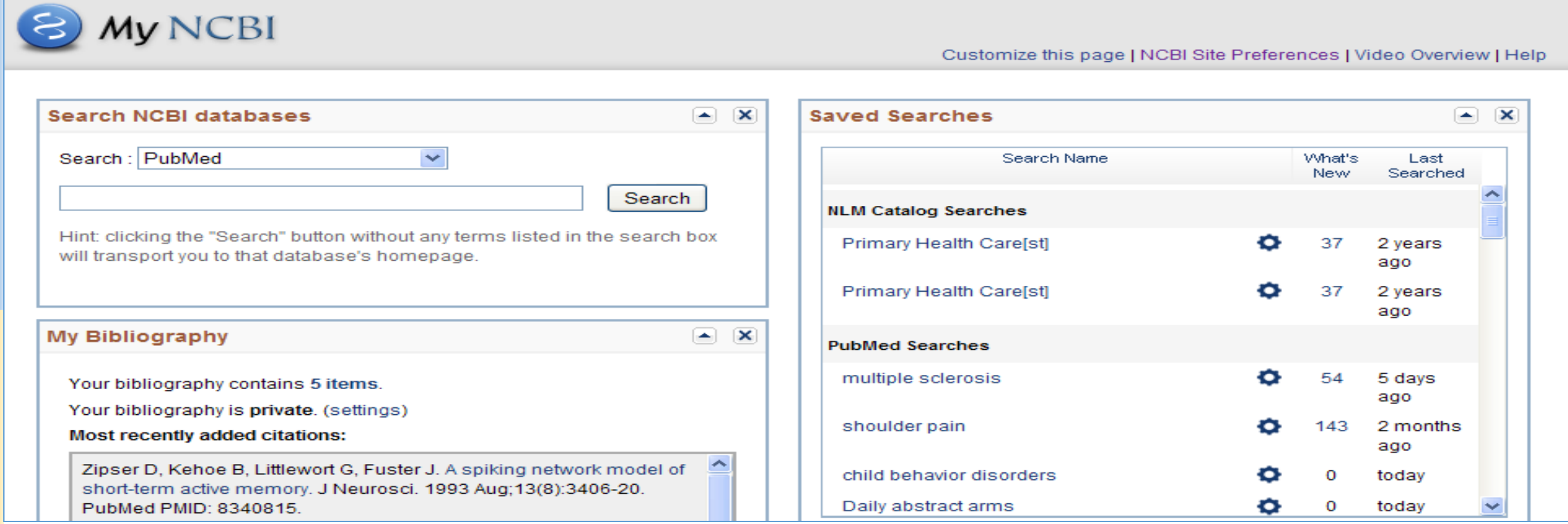
PubMed

Here is a a short video demonstrating this search.

Step 1: Use PICO to formulate the search strategy; start with the Patient problem(s) and Intervention

Enter the term for the patient problem and the intervention: **obesity AND diabetes type 2 AND bariatric surgery**. PubMed attempts to map your terms to appropriate Medical Subject Headings (MeSH). MeSH is the standard terminology used by the indexer and helps find articles on specific topics, regardless of the exact wording used by the authors.

URL to Searching PubMed Using PICO Tutorial (Duke University)



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- Save records (Collections, My Bibliography)
- Save searches (Saved Searches)
- Customize your results
  (Filters, My NCBI Preferences)

How To

Sign in to NCBI

PubMed

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PubMed comprises more than 23 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.

PubMed Commons

PubMed's new commenting system

More

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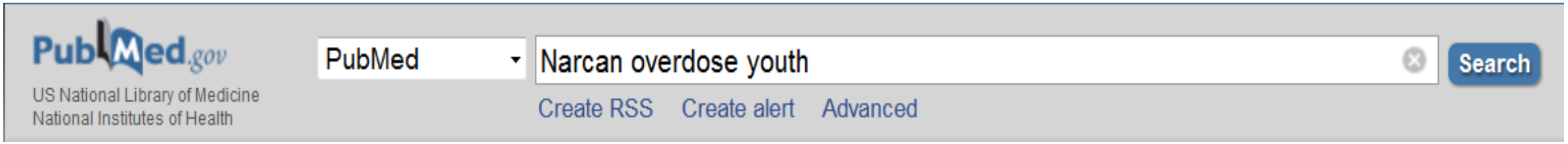
A PubMed Subject Search



- Be specific
- Don't use quotation marks
- Don't worry about capitalization
- Use key words for main concepts
- Leave out words like **the**, **of, for**
- The word "and" is a Boolean operator; it is assumed and automatic

Automatic Term Mapping

- **Subject**
- **Journal**
- **Author and Investigator names**

- As soon as PubMed finds a match, the mapping stops. That is, if a term matches in the MeSH Translation Table, PubMed does not continue looking in the next table.

- If no match is found, PubMed breaks apart the phrase and repeats the process until a match is found.

Entry Terms and Mapping

- NSAIDS → anti-inflammatory agents, non-steroidal
- Heart attack → myocardial infarction
- Varicella → herpesvirus 3, human OR chickenpox
- Nurse → nurses OR breastfeeding

- DVT ≠ Deep Vein Thrombosis
- PID ≠ Pelvic Inflammatory Disease

(Will demonstrate using MeSH Browser)

Search Details

PubMed.gov
US National Library of Medicine
National Institutes of Health

PubMed | Narcan overdose youth | Search

Create RSS Create alert Advanced

Query Translation:

```
("naloxone"[MeSH Terms] OR "naloxone"[All Fields] OR
"narcan"[All Fields]) AND ("drug overdose"[MeSH Terms] OR
("drug"[All Fields] AND "overdose"[All Fields]) OR "drug
overdose"[All Fields] OR "overdose"[All Fields]) AND
("adolescent"[MeSH Terms] OR "adolescent"[All Fields] OR
"youth"[All Fields])
```

Search URL

Result:

77

Translations:

narcan	"naloxone"[MeSH Terms] OR "naloxone"[All Fields] OR "narcan"[All Fields]
overdose	"drug overdose"[MeSH Terms] OR ("drug"[All Fields] AND "overdose"[All Fields]) OR "drug overdose"[All Fields] OR "overdose"[All Fields]
youth	"adolescent"[MeSH Terms] OR "adolescent"[All Fields] OR "youth"[All Fields]

Adjacency Searching

Phrase Searching

When searching for phrases:

- Search the phrase first without quotes or search tags.
- Check Search details to see how the search was translated.
- Use quotes only when your phrase is broken apart.

Sometimes even quotes won't work because not all phrases are recognized as phrases.

Searching a phrase in quotes shuts off Automatic Term Mapping

Phrase Searching Example

aids drugs breast feeding = 418

(processed using ATM, many relevant results)

"aids drugs" AND "breast feeding" = 3

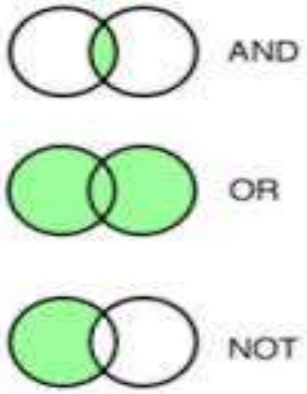
(very limiting; okay for specific items)

Retrovirus meeting. Hope on new **AIDS drugs**, but **breast-feeding** strategy backfires.

Cohen J.

Science. 2007 Mar 9;315(5817):1357. No abstract available.

Combining Search Terms



AND – OR - NOT

AND	**Narrows** search to only items **containing both terms**; best for combining 2 **concepts**
OR	**Broadens** search to items **containing any terms**; best for combining **synonyms**
NOT	**Narrows** search to items **containing 1 term but not another**; use with **caution**

URL for Pub Med Tutorial Demonstration

PubMed.gov
US National Library of Medicine
National Institutes of Health

PubMed | aids drugs breast feeding | Search

RSS Save search Advanced Help

Show additional filters

Text availability
Abstract available
Free full text available
Full text available

Publication dates
5 years
10 years
Custom range...

Species
Humans
Other Animals

Article types
Clinical Trial
Meta-Analysis
Practice Guideline
Randomized Controlled Trial
Review
Systematic Reviews
more ...

Languages
English
more ...

Clear all

Show additional filters

Display Settings: Summary, 5 per page, Sorted by Recently Added

Send to:

Filters: Manage Filters

Results: 1 to 5 of 418

<< First < Prev Page 1 of 84 Next > Last >>

1. Use of lipid-based nutrient supplements by HIV-infected Malawian women during lactation has no effect on infant growth from 0 to 24 weeks.
Flax VL, Bentley ME, Chasela CS, Kayira D, Hudgens MG, Knight RJ, Soko A, Jamieson DJ, van der Horst CM, Adair LS.
J Nutr. 2012 Jul;142(7):1350-6. Epub 2012 May 30.
PMID: 22649265 [PubMed - indexed for MEDLINE]
Related citations

2. Pregnancy and infant outcomes among HIV-infected women taking long-term ART with and without tenofovir in the DART trial.
Gibb DM, Kizito H, Russell EC, Chidziva E, Zalwango E, Nalumenya R, Spyer M, Tumukunde D, Nathoo K, Munderi P, Kyomugisha H, Hakim J, Grosskurth H, Gilks CF, Walker AS, Musoke P; DART trial team.
PLoS Med. 2012;9(5):e1001217. Epub 2012 May 15.
PMID: 22615543 [PubMed - indexed for MEDLINE] Free PMC Article
Related citations

3. Nevirapine prophylaxis during breastfeeding.
Ishikawa N, Miyano S, Sikazwe I.
Lancet. 2012 May 12;379(9828):1787-8; author reply 1788. No abstract available.
PMID: 22579315 [PubMed - indexed for MEDLINE]
Related citations

4. Maternal and infant antiretroviral regimens to prevent postnatal HIV-1 transmission: 48-week follow-up of the BAN randomised controlled trial.
Jamieson DJ, Chasela CS, Hudgens MG, King CC, Kourtis AP, Kayira D, Hosseinipour MC, Kamwendo DD, Ellington SR, Wiener JB, Fiscus SA, Tegha G, Mofolo IA, Sichali DS, Adair LS, Knight RJ, Martinson F, Kacheche Z, Soko

Find related data
Database: Select
Find items

Search details
("anti-hiv agents"[MeSH Terms] OR ("anti-hiv"[All Fields] AND "agents"[All Fields]) OR "anti-hiv agents"[All Fields] OR ("aids"[All Fields] AND
Search
See more...

Recent activity
Turn Off Clear
aids drugs breast feeding (418) PubMed
Psychosis PubMed Health
psychosis (235) PubMed Health
amantadine (49) PubMed Health
Trifluoperazine for schizophrenia PubMed Health
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Article types
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More ...

Text availability
Abstract
Free full text
Full text

PubMed Commons
Reader comments

Publication dates
5 years
10 years
Custom range...

Species
Humans
Other Animals

Clear all

Show additional filters

Display Settings: Summary, 20 per page, Sorted by Recently Ad

Results: 1 to 20 of 111462

1. MicroRNA-451 Exacerbates Lipotoxicity in Cardiac My Hypertrophy in Mice through Suppression of the LKB1
Kuwabara Y, Horie T, Baba O, Watanabe S, Nishiga M, K, Kita T, Kimura T, Ono K.
Circ Res. 2014 Oct 31. pii: CIRCRESAHA.114.304707. [Epub ahea
PMID: 25362209 [PubMed - as supplied by publisher]

2. The Expression of GPR109A, NF-kB and IL-1β in Peri **Type 2 Diabetes.**
Liu F, Fu Y, Wei C, Chen Y, Ma S, Xu W.
Ann Clin Lab Sci. 2014 Fall;44(4):443-8.
PMID: 25361930 [PubMed - in process]

3. Association of impaired fasting glucose, diabetes and outcome of peripheral artery disease: a cohort study.
Golledge J, Quigley F, Velu R, Walker PJ, Moxon JV.
Cardiovasc Diabetol. 2014 Nov 1;13(1):147. [Epub ahead of print]
PMID: 25361884 [PubMed - as supplied by publisher]

Filters-Subjects

more ...

Languages
English
more ...

Subjects
AIDS
Cancer
more ...

Journal categories
Core clinical journals
Dental journals
MEDLINE
Nursing journals

Modulatory effects of **acupuncture** on murine

Subjects

- [x] AIDS
- [ ] Bioethics
- [x] Cancer
- [ ] Complementary Medicine
- [ ] Dietary Supplements
- [ ] History of Medicine
- [ ] Toxicology
- [ ] Veterinary Science

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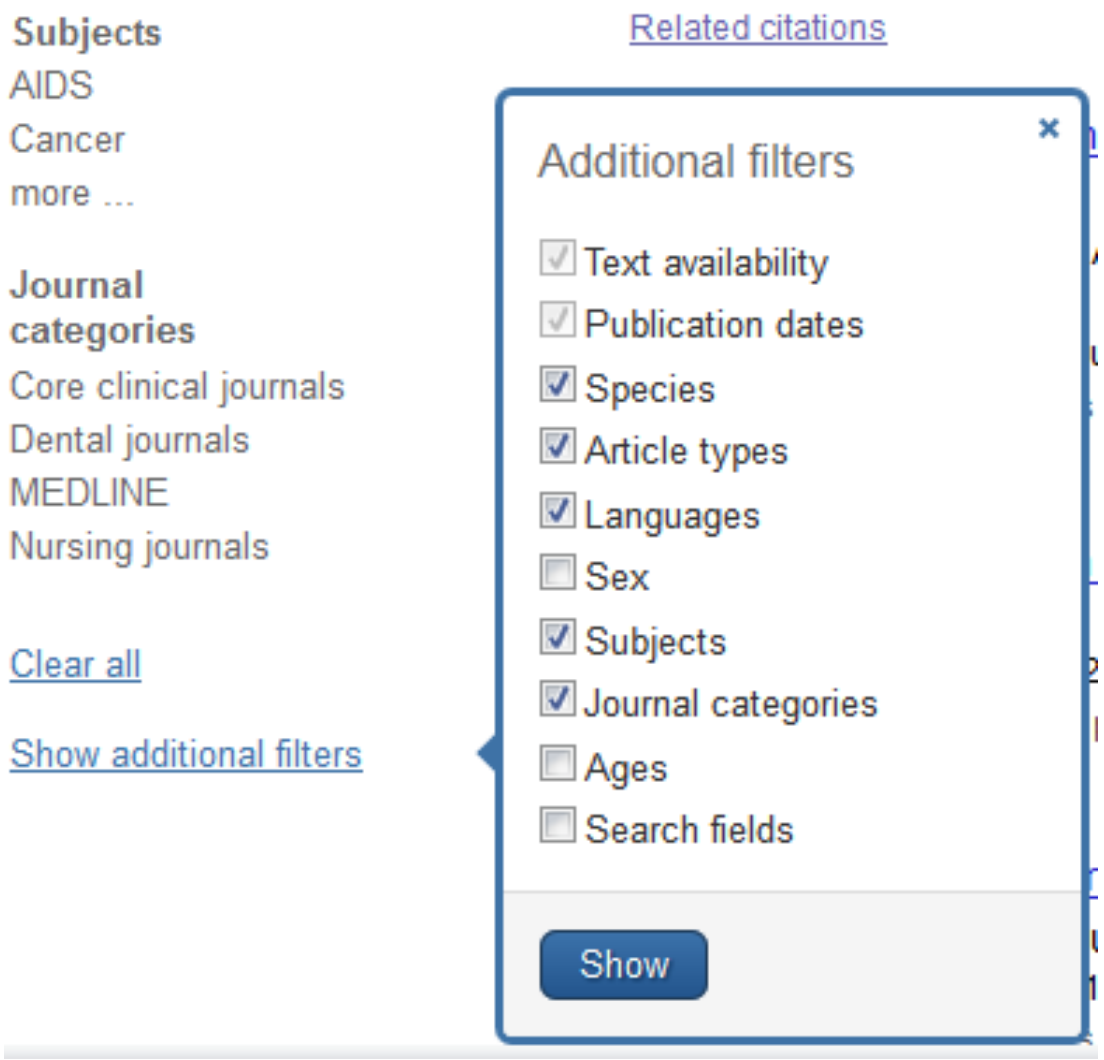
Filters-Journal Categories



URL for PubMed Subject Filters

Search Results with Filters Applied

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US National Library of Medicine
National Institutes of Health

PubMed | aids drugs breast feeding | Search

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Text availability clear
- ✓ Abstract available
- Free full text available
- Full text available

Publication dates clear
- ✓ 5 years
- 10 years
- Custom range...

Species

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Results: 1 to 5 of 106

Filters activated: Abstract available, published in the last 5 years, English
Clear all

1. Use of lipid-based nutrient supplements by HIV-infected Malawian women during lactation has no effect on infant growth from 0 to 24 weeks.
Flax VL, Bentley ME, Chasela CS, Kayira D, Hudgens MG, Knight RJ, Soko A, Jamieson DJ, van der Horst CM, Adair LS.
J Nutr. 2012 Jul;142(7):1350-6. Epub 2012 May 30.
PMID: 22649265 [PubMed - indexed for MEDLINE]
Related citations

Filters: Manage Filters

Titles with your search terms
Retrovirus meeting. Hope on new AIDS drugs, but b [Science. 2007]
See more...

63 free full-text articles in PubMed Central
Pregnancy and infant outcomes among HIV-infec [PLoS Med. 2012]
Extended prophylaxis with nevirapine and cotrim [AIDS. 2012]
Nelfinavir and its active metabolite, Antimicrob Agents Chemother. 2...]

One Good article Leads to More!

Results: 1 to 20 of 209

1. Legal. PCTs taken to court over use of cheaper drug.
   Calkin S.
   Health Serv J. 2012 Apr 26;122(6303):10-1. No abstract available.
   PMID: 22741353 [PubMed - indexed for MEDLINE]
   Related citations

2. Rate of serious **adverse effects** in a series of **bevacizumab** and ranibizumab injections.
   Sharma S, Johnson D, Abouammoh M, Hollands S, Brissette A.
   Can J Ophthalmol. 2012 Jun;47(3):275-9.
   PMID: 22687306 [PubMed - indexed for MEDLINE]
   Related citations

Sample Search

Does daily recess improve physical activity in school age students?

- P
- I
- C
- O

Clinical Queries

Search by Clinical Study Category

- **Category**
  - Etiology
  - Diagnosis
  - Therapy (default)
  - Prognosis
  - Clinical prediction
- **Scope**
  - Narrow specific search
  - Broad sensitive search(default)

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Results: 1 to 20 of 417 Selected: 2

1. Use of lipid-based nutrient supplements by l
women during lactation has no effect on infa
weeks.
Flax VL, Bentley ME, Chasela CS, Kayira D,
A, Jamieson DJ, van der Horst CM, Adair LS
J Nutr. 2012 Jul;142(7):1350-6. Epub 2012 May 30.
PMID: 22649265 [PubMed - indexed for MEDLINE]
Related citations

2. Pregnancy and infant outcomes among HIV
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Gibb DM, Kizito H, Russell EC, Chidziva E, Z
Spyer M, Tumukunde D, Nathoo K, Munderi I
Grosskurth H, Gilks CF, Walker AS, Musoke I
PLoS Med. 2012;9(5):e1001217. Epub 2012 May 15
PMID: 22615543 [PubMed - indexed for MEDLINE]
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2 selected items

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Sort by: Recently Added

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Subject: 2 selected items - PubMed

Additional text

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search
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re: [Science. 2007]
See more...

articles in
ant outcomes
[PLoS Med. 2012]
xis with nevirapine
amor [AIDS. 2012]
ctive metabolite,
ts Chemother. 2...]
See all (63)...

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NEJM FULL TEXT

N Engl J Med. 2012 Mar 1;366(9):808-18.

A randomized trial of nicotine-replacement therapy patches in pregnancy.

Coleman T, Cooper S, Thornton JG, Grainge MJ, Watts K, Britton J, Lewis S; Smoking, Nicotine, and Pregnancy (SNAP) Trial Team.

Collaborators (60)

Division of Primary Care, U.K. Centre for Tobacco Control Studies and National Institute for Health Research School for Primary Care Research, University of Nottingham, Nottingham, United Kingdom.

Abstract

BACKGROUND: Nicotine-replacement therapy is effective for smoking cessation outside pregnancy and its use is widely recommended during pregnancy. We investigated the efficacy and safety of nicotine patches during pregnancy.

METHODS: We recruited participants from seven hospitals in England who were 16 to 50 years of age with pregnancies of 12 to 24 weeks' gestation and who smoked five or more cigarettes per day. Participants received behavioral cessation support and were randomly assigned to 8 weeks of treatment with active nicotine patches (15 mg per 16 hours) or matched placebo patches. The primary outcome was abstinence from the date of smoking cessation until delivery, as validated by measurement of exhaled carbon monoxide or salivary cotinine. Safety was assessed by monitoring

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cystic fibrosis

MS treatment

asthma

cerebral folate deficiency syndrome

myelofibrosis

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of smoking-cess [Clin Ther. 2008]

Review Nicotine replacement

chrane Database Syst Rev. 2000]

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Evidence-based Practice

At the conclusion of this activity, participants will be able to:

- Describe the 5 major steps in conducting a systematic review.
- List the evidence-based resources available on the AHRQ Web site, including those available through the EHC Program.
- Locate the resources available on the USPSTF Web site, including the ePSS tool.
- Explain how the EHC Program resources, the USPSTF recommendations, and the ePSS tool can be integrated into APRN clinical decision making.
- Demonstrate how to download the ePSS application to a PDA or mobile device.

URL for AHRQ CE for Nurses

Cornell University

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New policy: Doctors should encourage early literacy

Evidence established long ago that reading to young children – especially if you engage in a dialogue with them while you're reading – helps them develop language skills and prepare for school.

Now the American Academy of Pediatrics has issued a new policy encouraging doctors to talk with parents about reading aloud to children, and providing books to low-income families at pediatric well visits. [Read more...]

Recess before lunch to improve eating habits?

When my son started kindergarten last year, I was astonished at how little of his lunch he actually ate. I would pack a nutritious meal displayed in a cute, compartmentalized tray, and often he only took a small bite of each item I packed. [Read more...]

Lunch hour? Try going for a walk

If I drive past the local business park around lunchtime, I typically see at least three or four groups of people walking outside. The practice seems like a good idea. It provides light aerobic exercise, gets people outside to soak up some Vitamin D, and can serve as a social hour if you're walking with friends and colleagues. [Read more...]

About

The blog is based on one key principle: Now more than ever, people need help separating the good scientific information from the bad. We are all about assessing the scientific evidence on human problems and looking at how to use it every day. You can click on the topics above to see blog posts on specific subjects.

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URL for Evidence-Based Living (Cornell University)

Questions

Viva La Evidence!

URL for Viva La Evidence (James McCormack)

Thank You!

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http://nnlm.gov/mar/
lydia@pitt.edu

This project has been funded in whole or in part with Federal funds from the National Library of Medicine, National Institutes of Health, Department of Health and Human Services, under Contract No. HHS-N-276-2011-00003-C with the University of Pittsburgh, Health Sciences Library System.