PubMed and Beyond: Clinical Resources from the National Library of Medicine

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National Network of Libraries of Medicine, Middle Atlantic Region
February 12, 2018
Class materials available:

“The National Library of Medicine (NLM), on the campus of the National Institutes of Health in Bethesda, Maryland, has been a center of information innovation since its founding in 1836”.

[URL](https://www.nlm.nih.gov) for the National Library of Medicine
National Network of Libraries of Medicine (NNLM)

- Trainings
- Funding
- Consultations on resources
- Exhibits

URL for NNLM

Middle Atlantic Region
Objectives

- Define evidence-based practice
- Find patient education information using MedlinePlus and Genetics Home Reference
- Access drug information using Drug Information Portal and other drug resources
Objectives, continued

- Find clinical trials by condition and limit to those with results in ClinicalTrials.gov
- Find clinical practice guidelines
- Find systematic reviews in PubMed Health and PubMed/MEDLINE
Alphabet soup! What does it all mean?
Evidence-Based Practice
Evidence-based medicine

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

Evidence-based nursing

Evidence-based nursing is an approach to health care practice that enables nurses to provide the highest quality care based on the best evidence available to meet the needs of their patients.

Melnyk & Fineout-Overholt, 2005
Some Studies That I Like To Quote

Source: James McCormack

Video URL
Misconception

EBN is **NOT** a collection of statistical summaries, ignoring patient preferences and clinical expertise.
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

Limits of Evidence-Based Practice

Objectives: To determine whether parachutes are effective in preventing major trauma related to gravitational challenge.

Design: Systematic review of randomised controlled trials.

Data Sources: Medline, Web of Science, Emerge, and the Cochrane Library databases; appropriate internet sites and citation lists.

Study Selection: Studies showing the effects of using a parachute during free fall.

Main Outcome Measure: Death or major trauma, defined as an injury severity score > 15.

Results: We were unable to identify any randomised controlled trials of parachute intervention.

Conclusions: As with many interventions intended to prevent ill health, the effectiveness of parachutes has not been subjected to rigorous evaluation by using randomised controlled trials. Advocates of evidence-based medicine have criticized the adoption of interventions evaluated by using only observational data. We think that everyone might benefit if the most radical protagonists of evidence-based medicine organised and participated in a double blind, randomised, placebo-controlled, crossover trial of the parachute.

Reblished in


PMID: 14694648 [PubMed - indexed for MEDLINE]  PMCID: PMC300380 

Free PMC Article

"Parachute" by Yakinodi is licensed under CC BY 2.0
Not all Evidence is Created Equal!

Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children.


There is a lot of research!

Over 28 million citations in PubMed!

Citations indexed for MEDLINE (FY2016): 869,666

Smoking cessation: 36885

Asthma: 169993

Diabetes: 613562
Other EBP challenges or concerns?
EBP Levels of Collaboration

Adapted from: Schmidt, N. (2015)
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

## The 5 A’s

**The Steps in the EBP Process:**

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

In a 70 year old woman with primary insomnia and a previous adverse reaction to hypnotics, can cognitive behavior therapy improve sleep quality and duration?

Source: Northwestern University Galter Health Sciences Library
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
Ask an answerable question (focused - searchable – clinical)

- **P**: Patient, Problem, Population
- **I**: Intervention or therapy
- **C**: Comparison, Control, Context
- **O**: Outcome
Finding the Evidence – Using PICO to formulate a search question

Choose your search terms

P
Teenagers
Adolescents
Young people

I
Brief intervention
Brief advice
Brief counselling
Minimal advice

O
Smoking cessation
Stop smoking
Quit smoking

In our example the P in the PICO (our patient or population) is teenagers. Authors may also describe them as adolescents or young people, so these phrases are listed in order to increase our chances of retrieving a more comprehensive set of results.

Source: Center for Evidence-Based Medicine
PICO reminder

Patient, Problem, Population

Intervention or therapy

Comparison, Control, Context

Outcome
Intervention/Therapy

In ______________________ (P),
How does ________________ (I)
Compared to ______________ (C)
Affect _________________(O)
Within _________________(T)?

Etiology

Are _________________ (P)
Who have ________________(I)
Compared with those without ____ (C)
At _______ risk for ___________ (O)
Over _____________________(T)?

Diagnosis

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

# Identifying the Best Study

<table>
<thead>
<tr>
<th>Type of Question</th>
<th>Suggested best type of Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapy</td>
<td>RCT &gt; cohort &gt; case control &gt; case series</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>Prospective, blind comparison to a gold standard</td>
</tr>
<tr>
<td>Etiology/Harm</td>
<td>RCT &gt; cohort &gt; case control &gt; case series</td>
</tr>
<tr>
<td>Prognosis</td>
<td>Cohort study &gt; case control &gt; case series</td>
</tr>
<tr>
<td>Prevention</td>
<td>RCT &gt; cohort study &gt; case control &gt; case series</td>
</tr>
<tr>
<td>Clinical Exam</td>
<td>Prospective, blind comparison to gold standard</td>
</tr>
<tr>
<td>Cost</td>
<td>Economic analysis</td>
</tr>
</tbody>
</table>

Let’s try it!

John is a 50-year-old life-long smoker. He has tried many times to quit but has been unsuccessful. His buddy mentioned that acupuncture worked for him. Is there evidence that it works?


Question adapted from: Supporting Clinical Care: An Institute in Evidence-Based Practice for Medical Librarians (2010)
What kind of question?

Therapy

Etiology

Diagnosis
PICO reminder

Patient, Problem, Population

Intervention or therapy

Comparison, Control, Context

Outcome

Greater Midwest Region

Middle Atlantic Region
Therapy

In ______________________ (P),
How does ________________ (I)
Compared to ______________ (C)
Affect ________________ (O)
Within ________________ (T)?
Let’s try it AGAIN!

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
PICO reminder

- **P**atient, Problem, Population
- **I**ntervention or therapy
- **C**omparison, Control, Context
- **O**utcome
Diagnosis template

In __________________________(P),
Are/is _______________________(I)
Compared with ________________(C)
More accurate in diagnosing _____(O)?
Step 2: Finding the best evidence

Finding the best evidence with which to answer the question through structured searches and understanding the literature:

- Primary Studies
  - Clinical trials
  - Randomized Controlled Trials
  - Multicenter studies
- Secondary (synthesized, summarized) Studies
  - Reviews
  - Meta-analyses
Hierarchy of Evidence

- Systematic Reviews and Meta Analyses
- Randomized Control Trials
- Cohort Studies
- Case Control Studies
- Cross Sectional Surveys
- Case Studies
- Ideas, Expert Opinions, Editorials
- Anecdotal

Quality of Evidence
Types of Studies

• Case series and Case Reports
• Case control studies
• Cohort studies
• Randomized, controlled clinical trials
• Systematic Reviews
• Meta-analysis
Step 3: Critical appraisal

Can it help?

Is it valid?

Is it important?
Step 4: Application

• How much will it help a patient or population?
• Does it meet their values and goals?
• Is it cost-effective?
### Step 5: Evaluation

<table>
<thead>
<tr>
<th>Formative</th>
<th>Process</th>
<th>Impact</th>
</tr>
</thead>
</table>
| • Assess whether element of program is appropriate  
  • Conducted prior to program initiation | • Assess program during delivery  
  • Quality control: what is being delivered vs. what is intended | • Assess program objectives being met  
  • May be completed after program or after program has been established for some time |

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

BREAK!
Patient Education

MedlinePlus®
Trusted Health Information for You

Genetics Home Reference
Your Guide to Understanding Genetic Conditions

HealthReach
Health Information in Many Languages
MedlinePlus details:

• 1000 health topics in English and Spanish
• Videos and animations
• Drug and herbal supplement information
• Multiple languages
• Medical dictionary and encyclopedia
• Easy-to-read materials
Drugs, Herbs and Supplements

Drugs

Learn about your prescription drugs and over-the-counter medicines. Includes side effects, dosage, special precautions, and more.

Browse by generic or brand name:

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z 0 9

For FDA approved labels included in drug packages, see DailyMed.

Herbs and Supplements

Browse dietary supplements and herbal remedies to learn about their effectiveness, usual dosage, and drug interactions.

All herbs and supplements

Prescription and over-the-counter medication information is from AHFS® Consumer Medication Information, copyrighted by the American Society of Health-System Pharmacists (ASHP), Inc., Bethesda, Maryland; Copyright © 2015. All Rights Reserved.
Videos & Tools

Watch health videos on topics such as anatomy, body systems, and surgical procedures. Test your knowledge with interactive tutorials and games. Check your health with calculators and quizzes.

Health Videos
View videos of anatomy and body systems and how diseases and conditions affect them.

Surgery Videos
Find videos of operations and surgical procedures.

Health Check Tools
Check your health with interactive calculators, quizzes and questionnaires.

Search all Videos & Tutorials

Understanding Medical Words Tutorial
Evaluating Health Information Tutorial
To Your Health: NLM Update Podcast
MedlinePlus topic pages

1000+ topics!

- Bedbugs
- Cardiac rehabilitation
- Caregivers
- Coping with chronic illness
- Elder abuse
- Food allergy

- Gay, lesbian, bisexual, and transgender health
- Osteoporosis
- Prescription drug abuse
- Self-harm
- Tick bites
MedlinePlus Connect

Linking Electronic Health Records to health information from MedlinePlus.gov

U.S. Department of Health and Human Services
National Institutes of Health (NIH)
National Library of Medicine (NLM)
Genetics Home Reference provides consumer-friendly information about the effects of genetic variation on human health.

Health Conditions

More than 1,200 health conditions, diseases, and syndromes

New & Updated Pages

New Pages
- combined oxidative phosphorylation deficiency 1
- spastic paraplegia type 5A
- DNMT3A overgrowth syndrome
Ollier disease

Description

Ollier disease is a disorder characterized by multiple enchondromas (benign) growths of cartilage that develop within the bones. These growths are common in the limb bones, especially in the bones of the hands and feet, the skull, ribs, and bones of the spine (vertebrae). Enchondromas cause deformities, shortening of the limbs, and fractures.

The signs and symptoms of Ollier disease may be detectable at birth but do not become apparent until around the age of 5. Enchondromas develop where normal growth occurs, and they frequently stop forming after growing in early adulthood. As a result of the bone deformities associated with this disorder, generally have short stature and underdevelopment.
Diabetes

Diabetes is a disease in which your body cannot properly use the food you eat for energy. Your cells need energy to live and grow.

When you eat, food breaks down into a form of energy called glucose. Glucose is another word for sugar. The glucose goes into your blood and your blood sugar rises. Insulin is a hormone made by your pancreas. It helps glucose move from your blood into your cells so your body can use it for energy. People cannot live without insulin.

There are three main types of diabetes.

- In Type 1 diabetes, the pancreas makes no insulin.
- In Type 2 diabetes, the pancreas does not make enough insulin or your body is not able to use the insulin the pancreas makes.
- In gestational diabetes during pregnancy, the mother is not able to make enough insulin to cover the needs of both mother and baby.
Opioid Misuse and Addiction Resources NEW

In response to the current opioid crisis, the National Library of Medicine partnered with Healthy Roads Media to produce a collection of materials that teach people about opioids and opioid misuse. The collection has 22 easy-to-read, English-language handouts, videos, and audio recordings.

Opioids

- Basics
- Pain
- Prescription opioid medicines
- Opioid pain medication management
- What you should know if your child is prescribed opioids for pain
- Getting rid of unused opioids

Opioid addiction

- What is drug addiction?
- Why do people take drugs?
- Opioids and the brain
- Why do some people become addicted to drugs, while others do not?
- The effects of opioid misuse on the body
- Fentanyl
- Heroin
- Prescription opioids and illegal opioids – What is the connection?
- Comorbidity or dual diagnosis
- Pregnancy and opioids
- Drug abuse and adolescents
- Stigma and opioids

Opioid treatment

- Treatment basics
- Medications and behavioral therapies
- Drug abuse treatment as part of healthcare
- Preventing overdoses and overdose deaths

In 2018, these materials will be culturally reviewed and translated into additional languages.
Exercises (part 1)

My son has been having trouble using his inhaler correctly. Do you have any tips?
Exercises (part 1 cont.)

I have been using St. John’s Wort for depression. Is it safe?
Exercises (part 1 cont.)

Can you find me information to give my pregnant patients who speak Nepali?
Drug information

Search
Drug Information Portal

Daily Med

Pillbox BETA
rapid identification, reliable information

Middle Atlantic Region
Information available for 71,947 drugs.

- By Name
- By Category

- Show examples.
- Show drug category names, results, and descriptions.
- Show top "By Name" searches (previous seven days).
- Show top "By Category" searches (previous seven days).
- Show top dispensed prescriptions in the US Market, 2010.
- Show common drug names list.
- Show generic name stems list.
- Show list of resources searched.
Drug Name: Diphenhydramine hydrochloride [USP:BAN:JAN]

Description: A histamine H1 antagonist used as an antiemetic, antitussive, for dermatoses and pruritus, for hypersensitivity reactions, as a hypnotic, an antiparkinson, and as an ingredient in common cold preparations. It has some undesired antimuscarinic and sedative effects.

Summary

- Summary of drug information (MedlinePlusDrug)
- Summary of consumer health information (MedlinePlusTopics)
- Summary of Drug-Induced Liver Injury (LiverTox)
- Manufacturers drug label (DailyMed)
- Clinical trials (ClinicalTrials.gov)
- Drug Identification and Image Display (Pillbox)

Detailed Summary

- References from scientific journals (Medline/PubMed)
- Full text biomedical articles (PubMed Central)
LABEL: **LIPITOR- atorvastatin calcium tablet, film coated**

**NDC Code(s):** 0071-0155-10, 0071-0155-23, 0071-0155-34, 0071-0155-40, [view more](#)

**Packager:** Parke-Davis Div of Pfizer Inc

**Category:** HUMAN PRESCRIPTION DRUG LABEL

**DEA Schedule:** None

**Marketing Status:** New Drug Application

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**DRUG LABEL INFORMATION**

If you are a consumer or patient please visit [this version](#).

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**DOWNLOAD DRUG LABEL INFO:** PDF | XML | [OFFICIAL LABEL (PRINTER FRIENDLY)](#)

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**VIEW ALL SECTIONS**

**HIGHLIGHTS OF PRESCRIBING INFORMATION**

These highlights do not include all the information needed to use LIPITOR safely and effectively. See full prescribing information for LIPITOR. LIPITOR - ® (atorvastatin calcium ...)

**FULL PRESCRIBING INFORMATION: CONTENTS**

Table of Contents

**1 INDICATIONS AND USAGE**

Therapy with lipid altering agents should be only one component of multiple risk factor intervention in individuals at significantly increased risk for atherosclerotic vascular disease ...

**2 DOSAGE AND ADMINISTRATION**

2.1 Hyperlipidemia and Mixed Dyslipidemia The recommended starting dose of LIPITOR is 10 or 20 mg
### Identify or Search for a Pill

<table>
<thead>
<tr>
<th><strong>Imprint:</strong></th>
<th>letters or numbers on either side of the pill</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pill does not have an imprint.</td>
</tr>
<tr>
<td><strong>Shape:</strong></td>
<td>Select Shape</td>
</tr>
<tr>
<td><strong>Color:</strong></td>
<td>Select Color</td>
</tr>
<tr>
<td><strong>Size:</strong></td>
<td>Select Size (search +/- 2mm)</td>
</tr>
<tr>
<td><strong>Score:</strong></td>
<td>Unknown 1 2 3 4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Drug Name or Ingredient(s):</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

| **Inactive Ingredient(s):**     |
|                                 |
| Find pills WITHOUT this ingredient. |

| **Label Author:**               |
|                                 |

| **DEA Schedule:**               |
|                                 |
| Select DEA Schedule              |

| **Product Code:**               |
|                                 |

- Do not search repackaged and relabeled medications.

**Search**  **Clear**

### Discover

There's more to a pill than how it looks. What's inside the pill other than the drug? Is it a controlled substance?

### Connect

Learn more than the pill's name. Pillbox links you to the drug label, clinical trials, breastfeeding safety, and more.

### Explore

Pillbox's advanced search app has been retired. A new Pillbox website is in development that has the same features as the advanced.

**URL** for Pillbox
<table>
<thead>
<tr>
<th>Name</th>
<th>Ingredient(s)</th>
<th>Imprint</th>
<th>Label Author</th>
<th>Show More Information</th>
<th>Drug Label</th>
<th>Drug Information Links</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celexa - Citalopram 40 MG Oral Tablet [Celexa]</td>
<td>Citalopram hydrobromide</td>
<td>F;P;40;MG</td>
<td>Forest Laboratories, Inc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Celexa - Citalopram 10 MG Oral Tablet [Celexa]</td>
<td>Citalopram hydrobromide</td>
<td>FP;10;MG</td>
<td>Forest Laboratories, Inc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Celexa - Citalopram 20 MG Oral Tablet [Celexa]</td>
<td>Citalopram hydrobromide</td>
<td>F;P;20;MG</td>
<td>Forest Laboratories, Inc.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Research

ClinicalTrials.gov

PubMed.gov

US National Library of Medicine
National Institutes of Health
ClinicalTrials.gov is a database of privately and publicly funded clinical studies conducted around the world.

Explore 257,211 research studies in all 50 states and in 201 countries.

ClinicalTrials.gov is a resource provided by the U.S. National Library of Medicine.

IMPORTANT: Listing a study does not mean it has been evaluated by the U.S. Federal Government. Read our disclaimer for details.

Before participating in a study, talk to your health care provider and learn about the risks and potential benefits.

URL for ClinicalTrials.gov
Patients and Families

• ClinicalTrials.gov offers a reliable and generally comprehensive list of ongoing trials that people might consider enrolling in

• Gives patients a centralized place to search by condition, location, and other trial characteristics

• “Access to more information about clinical trials is good for patients, the public and science,” NIH Director Francis S. Collins, M.D., Ph.D.*

*URL for source
Sample Uses of ClinicalTrials.gov

• Access information about specific trial
  o Find trials for potential participants
  o Track progress and protocol changes
  o See results (if available)

• Assess available evidence relevant to a specific clinical topic

• Assess nature of current and past research

• Review methodologies used in clinical trials
On the map below, click on a region to show a more detailed map (when available) or see a list of studies with locations in that region (when a detailed map is not available).
### 158 Studies found for:

**Recruiting, Not yet recruiting Studies | Asthma | United States**

Also searched for Asthmatic. [See Search Details](#)

<table>
<thead>
<tr>
<th>Row</th>
<th>Saved</th>
<th>Status</th>
<th>Study Title</th>
<th>Conditions</th>
<th>Interventions</th>
<th>Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Recruiting</td>
<td>Inflammatory Mediators and microRNA Analysis in Premenstrual Asthma</td>
<td>• Asthma</td>
<td></td>
<td>The Ohio State University Columbus, Ohio United States</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Not yet recruiting</td>
<td>Increased Lung Volume as Controller Therapy for Asthma</td>
<td>• Asthma</td>
<td>• Device: Positive Expiratory Pressure</td>
<td>Vermont Lung Center Colchester, Vermont United States</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Recruiting</td>
<td>Spirometric Response to Bronchial Thermoplasty in Patients With Severe Asthma</td>
<td>• Asthma</td>
<td>• Procedure: Bronchial Thermoplasty</td>
<td>OUHSC Oklahoma City, Oklahoma United States</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Recruiting</td>
<td>Characterizing Asthma Sputum Elasticity in the UCSF Severe Asthma Research Program</td>
<td>• Asthma</td>
<td></td>
<td>University of California, San Francisco, San Francisco, California United States</td>
</tr>
</tbody>
</table>

**Filters**

- **Status**
  - Recruiting
  - Not yet recruiting
  - Enrolling by invitation
  - Active, not recruiting
  - Suspended
  - Terminated
  - Completed
  - Withdrawn
  - Unknown status

**Expanded Access:** +
What is PubMed?

• The world’s premiere biomedical bibliographic database
• Online access to the MEDLINE database
• Contains more than 28 million citations to journal articles in these major content areas:
  • Biomedical Sciences
  • Nursing, Dentistry, Pharmacy and Allied Health
  • Veterinary Medicine
  • Preclinical sciences
3 ways to speed up your search

1. Use clinical queries to limit to clinical research areas
2. Use filters to limit your search quickly
3. Once you have one good article, click Related Citations to see more like it.
Clinical Queries

PubMed Clinical Queries

Results of searches on this page are limited to specific clinical research areas. For comprehensive searches, please use the Clinical Queries app.

Evidence-based search filters:
- Systematic Reviews
- Therapy
- Etiology
- Prognosis
- Diagnosis
- Clinical Prediction Guides

### Results: 5 of 15

**Topic:** Topical treatments for cutaneous warts.

Kwok CS, Gibbs S, Bennett C, Holland R, Abbott R.

**Question:** What is the efficacy of duct tape as a treatment for verruca vulgaris?

Stubbings A, Wacogne I.
Arch Dis Child. 2011 Sep; 96(9):897-9.

Warts (non-genital).

Loo SK, Tang WY.

Is it really possible to remove warts with duct tape?

[No authors listed]

Duct tape. warts and all.

[No authors listed]

See all (15)

### Results: 5 of 9

**Topic:** Warts (non-genital).

Loo SK, Tang WY.

**Question:** What is the efficacy of duct tape as a treatment for verruca vulgaris?

Stubbings A, Wacogne I.
Arch Dis Child. 2011 Sep; 96(9):897-9.

Warts (non-genital).

Loo SK, Tang WY.

To freeze or not to freeze: a cost-effectiveness analysis of wart treatment.

PubMed Clinical Queries

- Available from the PubMed Home page
- Therapy
- Diagnosis
- Etiology
- Prognosis
- Clinical Prediction Guides
  - Search filters: http://1.usa.gov/1bj4De4
- Systematic Review
  - Search filter: http://1.usa.gov/184vDzf
A PubMed Subject Search

- Be specific
- Don’t use punctuation (quotation marks)
- Don’t worry about capitalization
Examples

- 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
- Author and journal key words work too!
Automatic Term Mapping (ATM)

PubMed uses Automatic Term Mapping which recognizes thousands of concepts and maps to an appropriate term.

ATM checks these tables:
- Subjects (MeSH – Medical Subject Headings)
- Journal Titles
- Authors
Clinical Effectiveness and Clinical Guidelines
Systematic Reviews

- Critical assessment and evaluation of all research studies that address a particular clinical issue
- Studies are searched for and included in the review using a set of specific criteria
- May include a quantitative pooling of data, called a meta-analysis.
- **Example:** Scientists collected all the published studies that compared types of treatment for prostate cancer that had not spread beyond the prostate gland. They compiled the results of these studies in a comparative effectiveness review, which is a type of systematic review.

Source: Agency for Health Care Research and Quality
http://1.usa.gov/1gFJZnw
Systematic review to identify and appraise outcome measures used to evaluate childhood obesity treatment interventions (CoOR): evidence of purpose, application, validity, reliability and sensitivity

The study found that the Childhood obesity Outcomes Review (CoOR) outcome measures framework provides clear guidance of recommended primary and secondary Health Technology Assessment - NIHR Journals Library.

Version: August 2014
Show search results within this document

Systematic Reviews in PubMed

Social marketing approaches to nutrition and physical activity interventions in early care and education (Obes Rev. 2017)

Double burden of diseases worldwide: coexistence of undernutrition and overnutrition-related non (Obes Rev. 2017)


Committee Opinion No. 714 Summary: Obesity in Adolescents.

See all (195)...

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

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

Interventions to Reduce or Prevent Obesity in Pregnant Women: A Systematic Review

childhood obesity nutrition intervention (224)
AHRQ's National Guideline Clearinghouse is a public resource for summaries of evidence-based clinical practice guidelines.
Technology, Industry, Agriculture (208)
Humanities (35)
Information Science (596)
Named Groups (16)
Health Care (1159)
Environment and Public Health (641)
Health Care Economics and Organizations (340)
Health Care Facilities, Manpower, and Services (938)
Health Care Quality, Access, and Evaluation (622)
Health Services Administration (866)
Population Characteristics (643)
Publication Characteristics (10)
Clinical practice guideline on management of patients with diabetes and chronic kidney disease stage 3b or higher (eGFR <45 mL/min).

European Renal Best Practice


Centers for Disease Control and Prevention
Exercises (part 2)

I have been told that I am at risk for inheriting androgenetic alopecia. What is it? Are there any clinical trials I can join?
Exercises (part 2 cont.)

In my dad’s pill box, I saw a pill I couldn’t recognize. It’s pink and oval-shaped and has E 54 printed on it. What it is? Can you give me information on what’s it’s used for?
Exercises (part 2 cont.)

You work on a surgical unit. You notice that patients that bring music to listen to seem to complain less about postsurgical pain. Is there any evidence to support your observation?
Exercises (part 2 cont.)

You are a nurse in the NICU. You want to improve mother-child bonding and reduce infant mortality. You want to try “kangaroo care.” How do outcomes compare to conventional neonatal care?
Exercises (part 2 cont.)

Find clinical trials looking at avastin treatment for macular degeneration. How many are recruiting? Are there any trials with results?
Exercises (part 2 cont.)

Find evidence-based interventions for the management of adolescent obesity.
Exercises (part 2 cont.)

Silver is often an ingredient in creams for diabetic foot ulcers. Is there evidence that it is useful?
Exercises (part 2 cont.)

Of the resources introduced, which one is most relevant to your work or of most interest to you? Give an example of how you might use it in the future.
Thanks!

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This project is funded by the National Library of Medicine, National Institutes of Health, Department of Health and Human Services, under Cooperative Agreement Number UG4LM012342 with the University of Pittsburgh, Health Sciences Library System.