LEARNING OUTCOMES

- Apply PICO to sample clinical question
- Identify MeSH terms in PubMed for sample search query
- Differentiate between databases that contain
  - Background sources
  - Clinical summaries
  - Systematic reviews
  - Guidelines
  - Studies (RCTs, prospective cohort studies, case control studies, and case studies)
- Gain practice using limits in PubMed
CUSOM Library Website: http://lib.campbell.edu/CUSOM
Evidence-Based Medicine
Tags: osteopathic medicine, physician assistant program

This guide is designed to point medical students toward literature appropriate for evidence-based medicine.

Last Updated: Jun 28, 2013 | URL: http://guides.lib.campbell.edu/EBM

Introduction

Forming a Question

The EBM process begins when a clinician (You) is presented with a scenario that has some uncertain end or unanswered question. Evidence-based practice uses the PICO model for formulating a searchable question.

Background
(Clinical Summaries, Textbooks, etc)

The best place for clinicians to get up to speed on unfamiliar topics and filling holes in their knowledge base. Several of these resources are (or act as) clinical textbooks with either brief or detailed entries on conditions and interventions. Keep an eye on currency; background resources are often a few years out of date.

Secondary Literature
(Meta-analyses, Systematic Reviews, Evidence-based Guidelines)

These sources summarize the medical literature by finding (via explicit, thorough literature search) and appraising relevant individual studies to answer a particular clinical question. In most cases, clinicians should initiate a search for answers to clinical questions with the secondary literature. Please note that we have placed evidence-based guidelines into this category; the best clinical guidelines can provide an answer to a clinical question based on the best evidence. Again, keep an eye on currency.

Primary Literature
(Controlled Trials, Cohort Studies, Case Studies, etc.)

EBM Research Guide http://guides.lib.campbell.edu/EBM
THREE PRONGED APPROACH

The Patient

Patient’s characteristics & values

Best Evidence

Clinically relevant research, the literature

Clinical Expertise

Practitioner’s knowledge & experience
USING THE MEDICAL LITERATURE TO PROVIDE OPTIMAL PATIENT CARE

- Identify your problem
- Define a structured question
- Find the best evidence
- How valid is the evidence?
- What are the results?
- How should I apply the results to patient care?

Your patient is a 14-yr old boy with a weight problem (obesity). He has tried lifestyle changes and they have not been effective, so he and his parents ask you about other weight loss options for an adolescent.
USING THE MEDICAL LITERATURE TO PROVIDE OPTIMAL PATIENT CARE

- Identify your problem
- Define a structured question
- Find the best evidence
- How valid is the evidence?
- What are the results?
- How should I apply the results to patient care?
Background vs. Clinical questions

Background questions – general knowledge about a disorder. Look for info in Reference sources.

Clinical questions – specific knowledge about managing a patient or disorder. Apply EBP techniques, use EBP resources.

In a 14 year old obese male, how effective is the drug Meridia for long term weight loss?
BACKGROUND SOURCES

- UpToDate
- Essential Evidence Topics
- Medscape Reference
- Access Medicine
- ClinicalKey
- JAMAevidence
- Specialty texts via the Medical Library at CU’s School of Osteopathic Medicine
  - Harrison’s
- MICROMEDEX

Link to these resources on the EBM Research Guide (Background tab)
http://guides.lib.campbell.edu/EBM
CONVERT THE CLINICAL QUESTION TO PICO

P I C O helps to formulate the question

Patient/Population/Problem
Intervention
Comparison
Outcome
In a 14 year old obese male, how effective is the drug Meridia for long term weight loss?

C – no comparison/placebo
CREATING A SEARCH QUERY

P = In a 14 yo obese male
I = is *Meridia*
C =
O = effective and safe for long term weight loss?

\[ P \quad I \]
CREATING A SEARCH QUERY

P = In a 14 yo obese male
I = is Meridia
C =
O = effective and safe for long term weight loss?

P  

I
MeSH

MeSH (Medical Subject Headings) is the NLM controlled vocabulary thesaurus used for indexing articles for PubMed.

More Resources

E-Utilities
NLM MeSH Homepage
Results: 2

1. Adolescent
   A person 13 to 18 years of age.

2. Pregnancy in Adolescence
   Pregnancy in human adolescent females under the age of 19.
   Year introduced: 1979
Adolescent
A person 13 to 18 years of age.

PubMed search builder options

Subheadings:

- complications
- diagnosis
- drug therapy
- education
- etiology
- growth and development
- injuries
- legislation and jurisprudence
- metabolism
- organization and administration
- physiology
- surgery
- therapy

- Restrict to MeSH Major Topic.
- Do not include MeSH terms found below this term in the MeSH hierarchy.

Tree Number(s): M01.060.067

Entry Terms:
- Adolescents
- Adolescents, Female
- Adolescent, Female
- Female Adolescent
- Female Adolescents
- Teens
- Teen
- Teenagers
- Teenager
- Youth
- Youths
- Adolescence
- Adolescents, Male
- Adolescent, Male
- Male Adolescent
- Male Adolescents

See Also:

- Minors

All MeSH Categories
Persons Category
Persons
Age Groups
Adolescent

Preferred MeSH term

PubMed Search Builder

Add to search builder AND
Search PubMed

Related Information

PubMed
- PubMed - Major Topic
- Clinical Queries
- NLM MeSH Browser

Recent Activity

Turn Off Clear

- Adolescent
- teen (2)

See more...
MeSH (Medical Subject Headings) is the NLM controlled vocabulary thesaurus used for indexing articles for PubMed.

Using MeSH
- Help
- Tutorials

More Resources
- E-Utilities
- NLM MeSH Homepage

GETTING STARTED
- NCBI Education
- NCBI Help Manual
- NCBI Handbook
- Training & Tutorials

RESOURCES
- Chemicals & Bioassays
- Data & Software
- DNA & RNA
- Domains & Structures
- Genes & Expression
- Genetics & Medicine
- Genomes & Maps
- Homology
- Literature
- Proteins

POPULAR
- PubMed
- Bookshelf
- PubMed Central
- PubMed Health
- BLAST
- Nucleotide
- Genome
- SNP
- Gene
- Protein

FEATURED
- Genetic Testing Registry
- PubMed Health
- GenBank
- Reference Sequences
- Gene Expression Omnibus
- Map Viewer
- Human Genome
- Mouse Genome
- Influenza Virus
- Primer-BLAST

NCBI INFORMATION
- About NCBI
- Research at NCBI
- NCBI News
- NCBI FTP Site
- NCBI on Facebook
- NCBI on Twitter
- NCBI on YouTube
Results: 4

1. Obesity
   A status with BODY WEIGHT that is grossly above the acceptable or desirable weight, usually due to accumulation of excess FATS in the body. The standards may vary with age, sex, genetic or cultural background. In the BODY MASS INDEX, a BMI greater than 30.0 kg/m² is considered obese, and a BMI greater than 40.0 kg/m² is considered morbidly obese (MORBID OBESITY).

2. Mice. Obese
   Mutant mice exhibiting a marked obesity coupled with overeating, hyperglycemia, hyperinsulinemia, marked insulin resistance, and infertility when in a homozygous state. They may be inbred or hybrid.
   Year introduced: 1975

3. Mice. Inbred NOD
   A strain of non-obese diabetic mice developed in Japan that has been widely studied as a model for T-cell-dependent autoimmune insulin-dependent diabetes mellitus in which insulin is a major histopathologic feature, and in which genetic susceptibility is strongly MHC-linked.
   Year introduced: 1992

4. Leptin
   A 16-kDa peptide hormone secreted from WHITE ADIPOCYTES. Leptin serves as a feedback signal from fat cells to the CENTRAL NERVOUS SYSTEM in regulation of food intake, energy balance, and fat storage.
   Year introduced: 2000
Overweight & Obesity are both preferred MeSH terms.
CREATING A SEARCH QUERY

P = In a 14 yo obese male
I = is Meridia
C =
O = effective and safe for long term weight loss?

P
obese
obesity
overweight

I
adolescent
adolescence
teen
teenager
youth
CREATING A SEARCH QUERY

\[ P = \text{In a 14 yo obese male} \]
\[ I = \text{is Meridia} \]

**P**

obese

**obesity**

**overweight**

**I**

adolescent

adolescence

teen

teenager

youth

**ORANGE** = MeSH term
Brand Name Results

Displaying 1 result found for "Meridia"

Not looking for a brand name drug? Click here to expand your search to free-text results.


M

Meridia (Global)

SIBUTRAMINE HYDROCHLORIDE
Creating a search query

\[ P = \text{In a 14 yo obese male} \]
\[ I = \text{is Meridia} \]

\[ P \]
- obese
- obesity
- overweight

\[ I \]
- adolescent
- adolescence
- teen
- teenager
- youth

**ORANGE** = MeSH term
CREATING A SEARCH QUERY

(adolescent OR adolescence OR teen OR teenager OR youth OR child) AND (obese OR obesity OR overweight) AND (meridia OR sibutramine)

- Place an “OR” between synonyms of the same concept and surround concept terms with parentheses
- Place an “AND” between concepts
CREATING A SEARCH QUERY

(adolescent OR adolescence OR teen OR teenager OR youth OR child) AND (obesity OR obese OR overweight) AND (meridia OR sibutramine)

Use truncation characters, if available:
(adolescen* OR teen* OR youth OR child) AND (obes* OR overweight) AND (meridia OR sibutramine)
USING THE MEDICAL LITERATURE TO PROVIDE OPTIMAL PATIENT CARE

- Identify your problem
- Define a structured question
- Find the best evidence
- How valid is the evidence?
- What are the results?
- How should I apply the results to patient care?

EVIDENCE HIERARCHY

Clinical summaries
Meta analyses/Systematic reviews

Randomized control trials (RCTs)
Prospective cohort studies
Case-control (retrospective cohort) studies
Case studies
Opinion of authorities, editorials
A compendium of short summaries of the current state of the knowledge (and uncertainty) about clinical conditions (prevention, treatment, and/or diagnosis)

Entries are explicitly based on thorough searches and appraisals of the literature and created from the best available evidence from systematic reviews, RCTs and observational studies
EVIDENCE-BASED CLINICAL SUMMARIES

Examples:

- UpToDate
- Essential Evidence Plus (Essential Evidence Topics)

Link to these resources on the EBM Research Guide (Background tab)
http://guides.lib.campbell.edu/EBM
EBM Research Guide  http://guides.lib.campbell.edu/EBM
Medical topics in internal medicine (particularly strong), pediatrics, ob/gyn and family medicine

Designed to provide a quick way to get up to speed

An updated version of *UpToDate* is released every four months “What’s New” tab highlight changes with each major release.

For use in EBM is a mixed bag (use cautiously to answer clinical questions (i.e. PICO questions))

Articles are a mixture of medical conclusions based on data from studies and expert opinions of individual authors...not always clear which statements are evidence-based and which are not
EVIDENCE-BASED CLINICAL SUMMARY

- A medical reference tool providing over 700 highly relevant, easily digestible summaries structured in evidenced-based format.
- Includes best-evidence answers to primary care clinicians’ most important questions concerning symptoms, diseases, and treatment.
- Each topic has a:
  - “Strength of evidence” rating for every recommendation
  - “Bottom-line” summary that introduces each section
  - Broad array of helpful algorithms
EVIDENCE HIERARCHY

Clinical summaries
Meta analyses/Systematic reviews
Randomized control trials (RCTs)
Prospective cohort studies
Case-control (retrospective cohort) studies
Case studies
Opinion of authorities, editorials
SUMMARIZE A PARTICULAR TOPIC BY USING EXPLICIT METHODS TO PERFORM A THOROUGH LITERATURE SEARCH AND CRITICAL APPRAISAL OF INDIVIDUAL STUDIES TO IDENTIFY THE VALID AND APPLICABLE EVIDENCE

USE APPROPRIATE TECHNIQUES TO COMBINE THESE VALID STUDIES

PUBLISHED IN MANY JOURNALS AND FOUND IN A VARIETY OF OTHER ELECTRONIC SOURCES
SYSTEMATIC REVIEWS

Examples:

- Cochrane Database of Systematic Reviews
- DARE
- PubMed
- ACP Journal Club

Link to these resources on the EBM Research Guide (Secondary Literature tab)
http://guides.lib.campbell.edu/EBM
Which of the following databases containing systematic reviews have you used? Choose all that apply.

A. Cochrane Database of Systematic Reviews
B. DARE
C. PubMed
D. ACP Journal Club
Systematic Reviews/Meta-Analyses

- Cochrane Database of Systematic Reviews (CDSR) 🚀
  A database of top quality, constantly updated, systematic reviews (meta-analyses) created by the Cochrane Collaboration, an international organization of groups of experts. Each of the 6,500+ reviews are developed using strict methodology. The majority of reviews involve prevention and therapy; however, reviews involving diagnostic test accuracy are now being added (since 2008).
  Note: the default is to search all Cochrane databases; to search COCHRANE only, click on Search Limits, then select Cochrane Reviews under Product Types in the pop-up box.

- Database of Abstracts of Reviews of Effects (DARE) 🚀
  Although available on the same website (Cochrane Library), DARE differs from the Cochrane in that it does not create systematic reviews. Instead, DARE offers critical appraisals of the systematic reviews published in diverse journals, health databases, websites, and gray literature sources. Similar to the Cochrane, most of the reviews concern the effects of health interventions.
  Note: the default is to search all Cochrane databases; to search DARE only, click on Search Limits, then select Other Reviews under Product Types in the pop-up box.

- PubMed 🚀
  The best resource to find published literature in the health sciences. PubMed covers thousands of journals in all aspects of the health sciences (clinical, bench, economic, legal, social, etc.). Results can be limited to systematic reviews by entering a search query in Clinical Queries or applying the “Systematic Review” filter. Systematic Review

- ACP Journal Club 🚀
  Scans more than 100 clinical journals for high impact clinical studies or reviews that “warrant the attention of clinicians.” Provides abstracts with results and commentary for each article included.

- TRIP 🚀
  A meta search engine of many levels of literature including EBM synopses, systematic reviews, guidelines, primary literature, etc. Unlike PubMed and some of the other reviews resources, TRIP covers non-published reports and summaries.

- Agency for Healthcare Research and Quality (AHRQ) Evidence Reports 🚀
  A collection of evidence reports and technology assessments based on rigorous, comprehensive syntheses and analyses of relevant scientific literature, emphasizing explicit and detailed documentation of methods, rationale, and assumptions. The Evidence Reports are produced by the Evidence Practice Centers for the US Agency for Healthcare Research and Quality.

- US Preventive Service Task Force Recommendation Statements 🚀
  Reviews of the scientific evidence on preventive services (screening, counseling, and preventive medications) from an independent panel of experts made up of mainly primary care providers.

- PsycINFO 🚀
  Largest database devoted to peer-reviewed literature in behavioral science and mental health. Contains millions of records from journal articles (from -2500 journals), books, book chapters, technical reports, and dissertations. Results can be limited to systematic reviews by applying the meta analysis or systematic review limit in the Advanced search of the search engine.

Evidence Based Practice Guidelines

- National Guidelines Clearinghouse 🚀
  Provides structured, standardized summaries of thousands of current practice guidelines created by medical specialty associations, professional societies, public or private organizations, government agencies at the federal, state, or local level, or health care organizations. To be included in the NGC, the guideline creators must have performed a systematic literature search and a review of existing scientific evidence published in peer-reviewed journals during guideline development.

- EBM Guidelines 🚀
  EBM Guidelines contains 1,000 concise primary care practice guidelines covering a wide range of medical conditions. Both diagnosis and treatment are included. It also includes over 2,700 high-quality evidence summaries, a library of 900 high-quality photographs and images of all common and many rare dermatological conditions, electrocardiograms and eye pictures, and all reviews from The Cochrane Database of Systematic Reviews cited within EBM Guidelines are provided in full text.

- Essential Evidence Plus - EBMG Guidelines 🚀
  Aimed at primary care physicians, EBMG Guidelines includes 1,000 concise, evidence-based summaries of symptoms and diagnoses, over 3,500 high-quality evidence summaries and a library of 1,000 photographs and images.

- TRIP Guidelines are included from US, Australia, New Zealand, Canada, the UK and more.

- PubMed 🚀
  Results can be limited to published practice guidelines by applying the “Type of Article” filter. Guidelines.

- Current Preventive Guidelines in Primary Care (AccessMedicine) 🚀
  This handy guide draws information from many sources of the latest guidelines for preventive services, screening methods, and treatment approaches commonly encountered in the outpatient setting.

Comments (0)
SYSTEMATIC REVIEWS

- 5,600 systematic reviews and meta-analyses
- Rigorous, highly-regarded, reviews
- Focused on therapy/prevention, now covering diagnostic tests
- Database includes protocols -- plans or sets of steps to be followed in creating a systematic review
- When searching within the Cochrane Library:
  use the “Title, Abstract, Keywords” drop down to reduce irrelevant records

- Contains 15,000 reviews of systematic reviews.
- Complements the CDSR -- quality-assesses and summarizes reviews that have not yet been carried out by Cochrane
- When searching within the Cochrane Library:
  use the “The full review (Search All Text)” drop down to reduce irrelevant records
SYSTEMATIC REVIEWS

- Includes records/abstracts of journal articles (20 million)
- Very current info (sometimes pre-pub)
- Use MeSH terms for more efficient searching
- Use Boolean operators (AND, OR)
- Searching for systematic reviews:
  - Use the “Find Systematic Reviews” box in Clinical Queries
  - OR Apply the Subsets limit “Systematic Reviews”

- Often overlooked secondary source for evidence on any type of foreground question
- Reviews the best original and review articles from over 100 of the top clinical journals
- If included, it is important!
- Unlike DARE, clinical experts provide commentaries on the context, methods, and clinical applications of the findings of each article
1. Change in body composition during a weight loss trial in obese adolescents.
   PMID: 23382092 [PubMed - as supplied by publisher]
   Related citations

   PMID: 22747487 [PubMed - indexed for MEDLINE]
   Related citations

   Colman E. Circulation. 2012 May 1;125(17):2156-64. doi: 10.1161/CIRCULATIONAHA.111.082381. No abstract available.
   PMID: 22547756 [PubMed - indexed for MEDLINE] [Open Access] Free Article
   Related citations

   PMID: 22479013 [PubMed - indexed for MEDLINE]
   Related citations

5. The obesity and way for treatment.
   PMID: 22335148 [PubMed - indexed for MEDLINE]
   Related citations

6. Intragastric balloon in association with lifestyle and/or pharmacotherapy in the long-term management of obesity.
Systematic Reviews show up in the “Article types” menu.
Click & check it off to filter your results.
EVIDENCE HIERARCHY

Clinical summaries
Meta analyses/Systematic reviews

Randomized control trials (RCTs)
Prospective cohort studies
Case-control (retrospective cohort) studies
Case studies
Opinion of authorities, editorials

Studies

Level of Evidence
high
low
INDIVIDUAL STUDIES

Examples:

- MEDLINE (PubMed)
- Google Scholar
- Other health databases
  - CINAHL
  - PsycINFO

Link to these resources on the EBM Research Guide (Primary Literature Tab)
http://guides.lib.campbell.edu/EBM
Evidence-Based Medicine

This guide is designed to point medical students toward literature appropriate for evidence-based medicine.

Last Updated: Jul 29, 2013  URL: http://guides.lib.campbell.edu/EBM

Introduction  Forming a Question  Background  Secondary Literature  Primary Literature  About EBM  Textbooks & RSS Feeds

Pre-Assessed Articles (Trials, Studies, and Some Reviews)

- ACP Journal Club
  - Scans more than 100 clinical journals for high impact clinical studies or reviews that "warrant the attention of clinicians." Provides abstracts with results and commentary for each article included.

- Evidence Updates
  - A free resource from BMJ that includes a database of the highest-rated articles from over 120 of the top clinical journals. Each article entry includes abstract and ratings (based on newsworthiness and relevance) as well as comments from the clinical raters.

- POEMs research summaries
  - The archived collection of 3,500+ regularly updated Daily POEMs, POEMs ("Potentially Relevant and Economic"") are synopses of new evidence carefully filtered for relevance to patient care and evaluated for validity, from continuous review, grading, and critical appraisal of all 3000+ studies published monthly in more than 100 journals.

Comments (0)

Un-Assessed Individual Trials and Studies

- PubMed
  - The best resource to find published literature in the health sciences. PubMed covers thousands of journals in all aspects of the health sciences (clinical, bench, economic, law, social etc.). Results can be limited to individual studies/trials by applying "Type of Article" limits such Randomized Controlled Trials, Clinical Trial, Case Reports, etc.
  - Users looking for the best evidence to answer clinical questions might consider conducting searches within Clinical Queries.

- Cochrane Registry of Controlled Trials (CENTRAL)
  - A database of over 600,000 controlled trials identified by contributors of the Cochrane Collaboration and others, as a part of an international effort to hand search the world's journals and create an unbiased source of data for systematic reviews. CENTRAL includes reports published in conference proceedings and in many other sources not currently listed in PubMed or other bibliographic databases.
  - Note: the default is to search all Cochrane databases; to search CENTRAL only, click on Search Limits, then select Trials under Product Types in the pop-up box.

- PsychInfo
  - Largest databases devoted to peer-reviewed literature in behavioral science and mental health. Contains millions of records from journal articles (from ~2500 journals), books, book chapters, technical reports, and dissertations. Results can be limited to empirical studies in the "Methodology" section of the search options.

- CINAHL with Full Text
  - A good resource to find literature in allied health (Nursing, OT, PT, Sports Medicine, etc.) and complementary and alternative medicine. Results can be limited to individual studies and trials by applying "Randomized Controlled Trials" or the Clinical Queries filters.

- TRIP
  - A meta search engine of many levels of literature including EBM synopses, systematic reviews, guidelines, primary literature, etc. Guidelines are included from US, Australia, New Zealand, Canada, the UK and more.

Comments (0)
INDIVIDUAL STUDIES

- Includes only records/abstracts of journal articles (20 million)
- Very current info (sometimes pre-pub)
- Use MeSH terms for more efficient searching
- Use Boolean operators (AND, OR)
- Searching for single studies:
  - Use the “Search by Clinical Study Category” box in CQ
  - OR use the type of article limit: randomized controlled trials or other appropriate level

- Subset of larger Google: journal articles, technical reports, preprints, theses, books and other documents and web pages deemed “scholarly”
- Covers a great range of disciplines (strong in sciences and medicine)
- It is particularly helpful for users who want:
  - something good enough for the task at hand (not comprehensive)
  - grey literature--sources outside of published journals
  - info from sources across many disciplines
- Limitations: rudimentary search features, lack of transparency of database content, uneven coverage (time and scope) and a delay in indexing
PubMed Clinical Queries

Results of searches on this page are limited to specific clinical research areas. For comprehensive searches, use PubMed directly.

(adolescen* OR teen* OR youth OR child) AND (obes* OR overweight) AND (meridia OR sibutramine)
Safety assessment of an anti-obesity drug (sibutramine): a retrospective cohort study.

Trzeciak JE, Oleske DM, Klinkman D, Ferrufino CP, Lee WC.

Asteles Pharma Global Development, Inc., Product Safety and Pharmacovigilance, Northbrook, IL, USA.

Abstract

BACKGROUND: Obesity is a serious and rapidly growing health problem worldwide. Few therapies are available beyond diet, exercise and bariatric surgery. A previously approved medication, sibutramine, has been withdrawn from the market due to concerns over the potential of increased risk of cardiovascular (CV) events, based on a phase IV clinical trial that included only individuals at high risk for CV events.

OBJECTIVE: The aim of the study was to compare sibutramine users and matched non-users on rates of CV events, both overall and stratified by whether the patient qualified for on-label sibutramine use, using data from real-life clinical practice.

METHODS: A retrospective cohort was constructed from electronic medical record data from physician office practices (mostly primary care) in the UK and Germany, using the LifeLink™ database from IMS Health Incorporated. For patients with at least one physician visit in which sibutramine was prescribed between 1 April 1999 and 31 October 2008, the date of their first such prescription was their index date. Users and non-users were matched 1:1 on index date (within 30 days), sex, age group (six categories), Charlson Comorbidity Index and evidence of obesity (high body mass index [BMI] or, if BMI was missing, diagnosis of obesity or very high weight relative to height). The resultant total samples analysed were 6186 in Germany and 7284 in the UK. User and non-user cohorts in the samples were compared according to the ratio of their crude incidence rates of acute myocardial infarction (AMI), stroke and either AMI or stroke per 1000 patient-years of follow-up. Cox regression analysis was used to compare the risk of CV events as a hazard ratio (HR) with 95% confidence intervals (CIs) between sibutramine user and non-user cohorts, controlling for label status and/or history of prior CV disease at baseline.

RESULTS: The risk of AMI, stroke and either AMI or stroke was not higher among sibutramine users than comparable non-users of sibutramine in both Germany and the UK [Germany: HR 0.47 (95% CI 0.17, 1.26), 0.43 (0.23, 0.81) and 0.44 (0.26, 0.75), respectively; UK: HR 0.44 (0.15, 1.31), 0.63 (0.25, 1.60) and 0.54 (0.27, 1.10), respectively]. Regardless of whether or not the model controlled for prior CV disease (CVD), the direction and statistical significance of the differences did not change. In the sensitivity analyses including only those without a history of CVD in the 365 days prior to the index date there was no increased risk of CV events in either Germany or the UK.

CONCLUSION: This study offers a framework for the safety assessment of anti-obesity drugs using an observational epidemiological study design. Large electronic health databases were used to construct retrospective cohorts to examine the risk in a population using one specific anti-obesity drug. Use of sibutramine in general practice settings was not found to increase the risk of acute CV events.

PMID: 22780234 [PubMed - indexed for MEDLINE]

Publication Types, MeSH Terms, Substances

LinkOut - more resources
Clinical summaries
Meta analyses/Systematic reviews

Randomized control trials (RCTs)
Prospective cohort studies
Case-control (retrospective cohort) studies
Case studies
Opinion of authorities, editorials
REVIEW OF GENERAL SEARCH HINTS

- Identify synonyms
  - Check MeSH database via PubMed
  - Use generic and trade names for drugs and tests
  - Use full names along with common abbreviations

- OR between synonyms
  - OR between synonyms
  - Surround OR terms with parentheses

- Enter concepts as separate sets AND between P, I,C

  common cold AND (vitamin c OR ascorbic acid)
Evidence-Based Medicine

This guide is designed to point medical students toward literature appropriate for evidence-based medicine.

EBM Guides and Tutorials
- Intro to EBM (KT Clearinghouse)
- EBM Tools (CEBM Oxford)
- Introduction to Evidence Based Practice (Duke/UNC)
- Evidence Based Practice: Improving Patient Care (UCI)

EBM Pyramid

- Systems
- Summaries
- Synopses
- Syntheses
- Studies

Examples

- Computerized decision support
- Evidence based textbooks
- Evidence based journal abstract
- Systematic reviews
- Original journal articles

How May I Help You?

Sarah Steele
Ask a Librarian

Contact Info
Research Assistance Desk:
910-893-1467
Office: 910-893-1466
Send Email

Links:
- Profile & Guides

Subjects:
- Foreign Language, Physical Therapy, Osteopathic Medicine

Need More Help?
Request a Research Consultation
HOW TO GET HELP

If you have a question for a librarian, please:

- Visit the Research Assistance Desk
- Call: (910) 893-1467
- E-mail: reference@campbell.edu
- Schedule a Research Consultation: http://www.lib.campbell.edu/research-consultation
- Chat with us online: screen name WigginsMemLib
  - AIM
  - Google Talk
  - MSN messenger
  - Yahoo Messenger