Evidence-Based Integrative Therapies for Common Problems in Family Medicine

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Learning Objectives
As a result of this session, the participant will be able to...

Describe an evidence-based model of integrative medicine for patient care

Identify databases that are useful for evidence-based integrative medicine (EB-IM)

Complete a point-of-care exercise to identity and evaluate integrative options for a primary care problem
Case Example: Low Back Pain

• 45 yo male presents for discussion of options to treat is low back pain.
• He sees this and asks if you believe it is worth a try.....


• READ CASE
Integrative Medicine

CAHCIM definition…*Integrative Medicine is the practice of medicine that reaffirms the importance of the relationship between practitioner and patient, focuses on the whole person, is informed by evidence, and makes use of all appropriate therapeutic approaches, healthcare professionals and disciplines to achieve optimal health and healing.* (May 2004)

CAHCIM = Consortium of Academic Health Centers for Integrative Medicine
Evidence-Based Medicine

EBM: “The integration of the best available research evidence with our clinical expertise and our patient’s values and circumstances.”

EBM is not cookbook medicine

- Evidence does not directly advise individual patients
  - Inclusion and exclusion criteria
  - Co-morbidities

- Clinicians can use evidence to inform care of individual patients
  - Individual patient values differ
  - Balance of risks and benefits vary with individual
Our Goals in Medicine

- Provide the best care for each patient as an individual and member of a community
- Offer patients the best available information to use in making their healthcare decisions
- Assist patients in making use of all available healthcare alternatives
- Use the practitioner/patient relationship to achieve patient-centered decision-making
Best Research Evidence

- **Comprehensive** - evidence only known to be best if all available evidence is known

- **Valid** - critical appraisal determines potential for bias

- **Systematic** - selection/evaluation of evidence by protocol reduces bias

- **Current** - every day new evidence could be the best

- **Synthesized** - one study vs. the whole picture
Evidence-Based = conclusions based on best available evidence

“Evidence-based clinical reference” requires the following:

- Systematically identifying all applicable evidence
- Systematically selecting the best available evidence from that identified
- Systematically evaluating the selected evidence (critical appraisal)
- Objectively reporting the relevant findings and quality of the evidence
- Synthesizing multiple evidence reports
- Deriving overall conclusions and recommendations from the evidence synthesis
- Changing the conclusions when new evidence alters the best available evidence
Ideal Sources for Clinicians

- **Comprehensive** – covering all relevant articles AND information needs.
- **Valid/Systematic** – driven by best available evidence.
- **Relevant** – focus on clinically relevant information.
- **Easy to use** – organized for use by clinicians.
- **Affordable**
CAM Sources with Evidence

Free

- CAM on PubMed with Limits: Complementary Medicine
- Memorial Sloan-Kettering Cancer Center (About Herbs)
- National Center of Complementary and Integrative Health (NCCIH) -- previously NCCAM

Fee based

- Natural Medicine Database
- Dynamed
Free Evidence-Based Resources with CAM

- Systematic Reviews
  - Cochrane Library
    - CDSR Abstracts
    - DARE Abstracts
  - AHRQ

- Search Engines
  - TRIP
  - SUMSearch
  - Prime Answers (some content is free)
  - MEDLINE (thru PubMed)

- Evidence Summaries
  - Bandolier

- Guidelines
  - National Guideline Clearinghouse (not all are evidence-based)
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Federal Funding for CAM Research

- **1991** – The U.S. Congress passes legislation (P.L. 102-170) that provides $2 million in funding for fiscal year 1992 to establish an office of Alternative Medicine (OAM) within the National Institutes of Health (NIH) to investigate and evaluate promising unconventional medical practices.

- **1996** – The OAM is designated a World Health Organization Collaborating Center in Traditional Medicine.

- **1999** – OAM becomes National Center for Complementary and Alternative Medicine (NCCAM) and making it the 25th independent component of the NIH.

- **2015** – NCCAM renamed NCCIH. National Center for Complementary and Integrative Medicine after omnibus bill passed by Congress and signed by President Obama December 2014.
Differences in Paradigms

**CAM Practice**
- Traditional Diagnostic Criteria
- Individualized Treatment
- Evolving Treatment Course
- Patient/Provider Interaction Encouraged
- EMBRACING VARIABLES

**Clinical Research**
- Conventional Diagnostic Criteria
- Standardized Protocol
- Fixed Treatment Course
- Patient/Provider Interaction Discouraged
- REDUCING VARIABLES
Is placebo created equal?

![Bar chart showing pain reduction for Acupuncture and NSAIDS treatments with real and placebo conditions.]
Can a therapy be effective but not efficacious?

**Acupuncture for headache**
- Linde et al. JAMA. 2005
  • Acupuncture was no more better than sham
  • Both were better than wait list control
- Coeytaux et al. Headache, 2005
  • Acupuncture was better than being managed by headache specialty clinic alone
    - Decreased headache days
    - Improved health related QOL
  • Acupuncture leads to persisting, clinically relevant benefits for primary care patients with headache
    - 15% less medication
    - 25% less visits to GP
    - 15% less days sick from work
    - GBP9180 per QALY gained
Best Available Evidence

- Prenatal NSAID use associated with miscarriage in prospective cohort study
  - Do we need a randomized trial?
- Massage associated with improvement in fibromyalgia in non-randomized studies
  - Threshold for individual patient care
  - Threshold for reimbursement/policy
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Take-Home Points

- First: Do no harm
- Communication is critical
- Heirarchy of Evidence
- Best Available Evidence vs. RCT or else
- Quantity vs. Quality of evidence
- Framework and circumstances of patient vs. population-based studies to reduce variability
Next: Small Group Exercises

Objective: Model scenario that simulates point-of-care reality

Steps for small groups (appoint a scribe)

• Read case and formulate clinical questions
• Read question(s) and discuss search strategies
• Review answers found and discuss clinical interpretation.
• Discuss how to apply to patient care