Intro to Integrative Medicine

Rebekah Byrne, MD MPH
Assistant Professor
Department of Family and Community Medicine
Learning Objectives

• LO1: Define integrative medicine

• LO2: Review the scope of use of CAM therapies in the U.S.

• LO3: Review the 5 questions to ask before prescribing any integrative medicine therapy

• LO4: Learn how to safely navigate the efficacious use of integrative medicine treatment modalities using reliable information resources

• LO5: Complete a case exercise in evaluating and recommending integrative treatments

• LO6: Complete an experiential exercise in mind body medicine
LO1: What is Integrative Medicine (IM)?

"Integrative medicine 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 and lifestyle approaches and disciplines to achieve optimal health and healing."

-Academic Consortium for Integrative Medicine and Health
Primary Elements of IM

- Mind-body medicine: meditation, relaxation, stress coping, journaling, art therapy
- Movement: Exercise/physical activity
- Nutrition
- Social connection
- Physical environment
- Spiritual Health
Secondary Elements of IM

- Supplements (dietary, herbal)
- Conventional pharmaceuticals
- Traditional Healing Systems (TCM, Acupuncture, Ayurveda)
- Manual therapies: Chiropractic/osteopathic manipulation, massage
- Energy healing therapy
- Homeopathy
- Biofeedback
- Hypnosis
- Folk Medicine
LO2: Review the scope of use of complementary and alternative (CAM) therapies across the US
What percentage of U.S. adults use CAM therapies? Based on a survey of ~88,000 adults in 2012

A. 6%
B. 11%
C. 26%
D. 34%

What percentage of U.S. children are using a CAM treatment? *Based on survey data of ~33,000 in 2007

A. 3%
B. 6%
C. 12%
D. 20%

What approximate percentage of patients who used CAM therapies in the past year disclosed their use to their MD?

A. 10-15%
B. 28-37%
C. 51-58%
D. 81%

Why do you think patients do not disclose their use of CAM therapies to their physician?

- 61% “It wasn’t important for the doctor to know
- 60% “The doctor never asked”
- 31% It was none of the doctor’s business
- 20% the doctor would not understand
- 14% Thought their doctor would disapprove or discourage their CAM use
- 2% thought their doctor might not continue as their provider

Cost adults spent on CAM therapies in 2007

What therapies are US adults using?

10 Most Common CAM Therapies Among Adults - 2007

<table>
<thead>
<tr>
<th>Therapy</th>
<th>2002</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deep Breathing</td>
<td>17.7%</td>
<td>12.7%</td>
</tr>
<tr>
<td>Meditation</td>
<td>12.7%</td>
<td></td>
</tr>
<tr>
<td>Chiropractic &amp; Osteopathic</td>
<td>9.4%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Massage</td>
<td>8.6%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Yoga</td>
<td>8.3%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Diet-Based Therapies</td>
<td>6.1%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Progressive Relaxation</td>
<td>3.6%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Guided Imagery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homoeopathic Treatment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Therapies with significant increases between 2002 and 2007 are

- Deep Breathing: 11.6% to 12.7%
- Meditation: 7.6% to 9.4%
- Massage: 5.0% to 8.3%
- Yoga: 5.1% to 6.1%

What are the most commonly used supplements among adults?

- Fish oil—7.8%
- Glucosamine+/-Chondroitin—2.6%
- Probiotics—1.6%
- Melatonin—1.3%

Diagnoses cited by adults for using CAM

Discussion:
Why do you think people choose to use these therapies?
Reasons cited for choosing a CAM therapy

In summary, why do you need to know about Integrative Medicine?

- Our patients ARE using these therapies
- They often do not tell us about their use, so we need to do a better job at asking and being informed!
- Our patients are spending A LOT of $$ on these therapies
- Integrative medicine can be good medicine!
LO3: Using an IM Approach to Choosing a Therapy

*Five Questions to Consider before Prescribing Any Therapy*
Question 1: Does the therapy result in symptom resolution or symptom suppression?

How can we address the individual’s root causes?

- Addressing the root cause (especially for chronic disease) often entails considering modifiable lifestyle factors (mind body, sleep, nutrition, physical activity, substance use, stress.)

- Symptoms are our body asking for a change, make sure you’re not just putting a bandaid on a bigger problem

- Address acute care appropriately…remember IM does not reject allopathic medicine!
Question 2: What is the evidence?

Defining EBM

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

- What it isn’t…cookbook medicine, restricted to RCT’s and meta-analyses
Examine the Evidence
Strength of Recommendation Taxonomy (SORT)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Based on consistent, good-quality, patient-oriented evidence (e.g., systematic review or meta-analysis showing benefit, Cochrane Review with clear recommendation, high-quality patient-oriented randomized controlled trial). Example: Acupuncture for nausea and vomiting.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade A</td>
<td>Based on inconsistent or limited-quality patient-oriented evidence. Example: Ginger for osteoarthritis.</td>
</tr>
<tr>
<td>Grade B</td>
<td>Based on consensus, usual practice, opinion, disease-oriented evidence (e.g., study showing a reduction in blood sugar but no studies in humans to show a benefit to those with diabetes).</td>
</tr>
</tbody>
</table>
Question 3: What is the potential harm?

**Grading risk**

<table>
<thead>
<tr>
<th>Grade 3 (most harm)</th>
<th>This therapy has the potential to result in death or permanent disability. Example: Major surgery under general anesthesia or carcinogenic effects of the botanical <em>Aristolochia</em> (birthwort).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 2 (moderate harm)</td>
<td>This therapy has the potential to cause reversible side effects or interact in a negative way with other therapies. Example: Pharmaceutical or neutraceutical side effects.</td>
</tr>
<tr>
<td>Grade 1 (least harm)</td>
<td>This therapy poses little, if any, risk of harm. Examples: Eating more vegetables, increasing exercise, elimination diets, encouraging social connection.</td>
</tr>
</tbody>
</table>
Weigh the evidence vs. potential harm

• A few examples…
  
  • Exercise for DM management: A,1
  
  • Hypnosis for IBS: B,1
  
  • Zinc for infectious diarrhea: B2
  
  • Astragalus root for infectious hepatitis C: C,2
  
  • Evidence/harm ratings found in “Integrative Medicine” by David Rakel
Question 4: What is the cost?

• IM approach can save money through shifting emphasis of healthcare to health promotion, prevention, and enhanced resiliency through attention to lifestyle. i.e. self care
Question 5: Does the therapy match the patient?

Remember to treat the individual

- Always use shared decision making
- Discuss risks, benefits, alternatives of all therapies
- Incorporate the patient’s belief systems
It is much more important to know what sort of patient has a disease than what sort of disease a patient has.

- William Osler
LO4: Making safe recommendations…
primum non nocere
Regulation of Dietary Supplements

Dietary and Supplement Health and Education Act of 1994

- Placed the responsibility of safety evaluation and labeling of products in the hands of their manufacturers and distributors

- FDA responsible for taking action against any adulterated or misbranded dietary products after reaching the market

- All ingredients are to be declared on the label

- Any adverse effects to be reported to Med Watch
Identifying Safe Supplements

- Independent organizations dedicated to supplement testing and quality control
- Look for their labels: ConsumerLab, US Pharmacopeial Convention, National Sanitation Foundation
- Don’t forget personal care products: Healthy Living App
Reliable IM Resources

- Now available, Natural Medicines at Matas Library

- Reviews evidence, safety, adverse effects, medication interactions, pregnancy/lactation data for supplements, botanicals

- Allows you to compare effectiveness of integrative intervention by condition

- Includes patient handouts
Natural Medicines

- Natural Medicines Brand Evidence-based rating
- Rating for product by Brand
- Based on 3 components: safety, effectiveness, & product quality
Reliable IM Resources

- matas.tulane.edu—>Clinical Portal—>Clinical Key—>Text Books: Integrative Medicine

- Organized by symptom/disease

- Uses evidence vs harm rating system
Reliable IM Resources

- Patient handouts: University of Maryland, University of Wisconsin
- Smartphone App: Memorial Sloan Kettering Cancer Center’s “About Herbs”: Lit review, contraindications, adverse reactions, herb-drug interactions
LO5: Patient Case: Exploring the integrative medicine approach
Ms. G is a 53 yo female who has been having problems falling asleep for the past 3 months since starting a new job. She wants to know if there’s anything “natural” that will work to help her sleep. She read about the woman who sleep walked off the bridge in Australia while taking Ambien and she’s afraid of using anything “too strong.”

- Current Listed meds: None regular takes Aleve prn. No allergies.
- Past Med Hx: B/L Knee OA, IBS
- Surg Hx: R ankle ORIF, C/S x 2
- Fam Hx: Unremarkable
- Soc Hx: No tob hx, drinks 2 glasses of red wine most nights, no drugs, lives with her husband, no abuse, she works as a teacher in a community college.

- Exam: BMI 30, BP 131/78, HR 95, RR 18, Temp 97.5F
  Physical exam unremarkable
Insomnia: Thinking about the root causes

What secondary causes of insomnia do you need to rule out?

- Psychiatric conditions (Depression, anxiety, substance abuse, PTSD)
- Medical conditions (Pain, heart failure, nocturia, RLS, GERD, night sweats, hot flashes, OSA)
- Medication side effect
Case

What other important question do you ask her about current meds?

• You ask her what complementary and alternative therapies such as OTC meds, vitamins, and supplements she is taking.

• She is taking a multivitamin, fiber for her IBS, glucosamine sulfate for her arthritis, and Panax Ginseng to help her feel more sharp during the day since she feels groggy from not getting enough sleep.
Case

- Use Natural Medicines to look up glucosamine and ginseng to see if insomnia is a side effect.

- Yes! Insomnia is the most commonly reported side effect of Ginseng.
Ms. G’s Sleep History

- Bedtime: 10pm
- Sleep Latency: 2-3 hours, during which she tosses and turns in bed, checks her phone, plays candy crush.
- Nighttime awakenings: 0-1x to urinate, otherwise generally stays asleep
- Awakens: 5:30AM during the week

- Activities before bed: Lies in bed watching the news, eats a bowl of chocolate ice cream, drinks 1-2 glasses of red wine. Eats dinner at 6pm.

- She doesn’t snore.

- Sleep Environment: Husband snores, bedroom is 68 degrees, dark

- Caffeine: Drinks 2 12 oz of Starbucks coffee in the morning, then gets a Grande Caramel Macchiato as her afternoon “pick me up.”

- Physical Activity: Goes for an evening walk after dinner.

- Circle possible root causes of her insomnia.
Rx:

What are some principles of sleep hygiene you could share with Ms. G to address some of her underlying root causes of insomnia?

• Avoid forcing sleep, if not asleep within 20 minutes get out of bed and return when sleepy
• Use the bedroom only for sleep and sex (no TV, eating, etc)
• Sleep only as much as you need to feel rested before getting out of bed
• Keep the sleep environment conducive to sleep (dark, clean, quiet, comfortable, cool)
• Keep a regular sleep schedule
• Avoid daytime naps
• Avoid alcohol, caffeine (including chocolate), and nicotine before bedtime
• Get regular exercise: 30 min at least 4x/wk, best before evening meal
What types of mind body therapies have evidence to support them in treating insomnia?

- A 2015 systematic review found that CBT was the most effective mind-body intervention for insomnia. Trauer JM, et al; Cognitive behavioral therapy for chronic insomnia: a systematic review and meta-analysis. Ann Intern Med. 2015;163(3)L191-204


- Others that have evidence: hypnosis, biofeedback, mindfulness based stress reduction, meditation, guided imagery
Sleep Hygiene, Exercise & Mind Body Practices: What are the side effects and what is the cost?
Practice evaluating a supplement: Melatonin

Ms. G asks if she would benefit from Melatonin for insomnia?
Review evidence summary of melatonin on Natural Medicines

- Appears to modestly decrease sleep onset latency (between 7-12 min), although effect may not be considered clinically significant.

- Subjectively some patients have benefit.

- Bottom line: More evidence needed before long term use can be recommended.


Source: Natural Medicines Database
Practice evaluating a supplement: Melatonin

Evaluating the harms: How safe is melatonin? Are there any patients who should avoid taking melatonin? Use Natural Medicines to answer these questions.

• Melatonin is “likely safe” when used orally or parenterally, short term or as a single dose. Seems to be safe when used up to 6 months.

• Interactions with diseases: Bleeding d/o, depression, diabetes, HTN, seizure d/o, transplant recipients

Source: Natural Medicines Database
Physician Self Care

• AASN Jan 2015: “In this global literature review of the medical students’ sleep experience, we find that poor sleep is not only common among medical students, but its prevalence is also higher than in non-medical students and the general population.” Azad MC, Fraser K, et al. *Sleep disturbances among medical students: a global perspective*. J Clin Sleep Med. 2015 Jan 15;11(1):69-74.
A challenge to you …

- Ask patients about their use of integrative therapies
- Look critically at your approach to health and wellbeing
- Notice how much of your time is spent focusing on disease and treating symptoms vs root causes
- Think about addressing the root cause of the patient’s symptoms
- See the person as a “whole” and try to support healing on every level (body, mind, spirit)
- Remember to practice self care