An Introduction to Integrative Medicine and Its Application in the Primary Care Setting

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Learning Objectives

• Define Integrative Medicine

• Review Complementary Approaches used in Integrative Medicine

• Examine Public Health Relevance of Integrative Medicine

• Illustrate Application of Integrative Medicine in the Primary Care Setting
Integrative Medicine

Integrative Medicine is the practice of medicine that reaffirms the importance of the relationship between the practitioner and the 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.
Integrative Medicine
Figure 3. A model for evidence-based clinical decisions.
Whole Person Approach
Common Modalities
Integrative Modalities

• Nutrition
Integrative Modalities

- Mind Body Medicine
  - Biofeedback
  - Guided Imagery
  - Hypnotherapy
  - Meditation
  - Mindfulness
  - Yoga
Mind Body Techniques

- Meditation
  - Mindfulness
- Mindful Eating
- Biofeedback & Autogenics
- Guided Imagery
- Breathing, Exercise & Movement
- Spirituality
- Energy Therapies
- Hypnosis
- Creative Expression
- Group Support
- Psychotherapy
Therapeutic Journaling

- 61 patients with asthma
- 39 intervention: 22 control

Baseline assessment, then write for 20 min on 3 consecutive days each week on their “experience with stress”
  - Intervention: write about most stressful experience ever undergone
  - Control: Describe plans for the day

FEV₁ measured at:
- baseline 2w 2mo 4mo
- C  64.0  58.8  65.8  65.3
- Ex  63.9  74.1  74.7  76.3

Journaling led to more than 10% increase in FEV₁ (~13%)

Smyth, JM et. al. “Effects of Writing about Stressful Experiences on Symptom Reduction in Patients with Asthma or Rheumatoid Arthritis: a Randomized Trial.” JAMA. 1999. 281(14) 1304-09.
Power of Relaxation

• Cross-sectional Study of 2 groups of 20 people

• For both long term practitioners of mind body techniques, as well as novices, genetic expression changed

• Significant alterations seen in cellular metabolism, oxidative phosphorylation, generation of reactive oxygen species, and response to oxidative stress.

Integrative Modalities

• Herbal Therapies

• Vitamins

• Minerals
Complementary Modalities

- Manual Medicine
  - Osteopathic Manipulation
  - Massage
  - Rolfing
  - Reflexology
  - Strain-Counterstrain
  - Bowen Technique
  - Postural Reeducation
    - Alexander Technique
    - Feldenkrais Method
Complementary Modalities

- Energy Medicine
  - Acupuncture
  - Reiki
  - Healing Touch
  - Crystal and Gem Therapy
  - Shamanic Healing
  - Magnetic Therapy
  - Music Therapy
  - Acupressure
Acupuncture for Fibromyalgia

• RCT

• 25 patients received acupuncture, 25 received sham acupuncture*

• Improvement in Fibromyalgia Impact Questionnaire seen (measured baseline, 1mo, and 7mo)

Complementary Modalities

• Traditional Approaches
  – Ayurveda
  – Traditional Chinese medicine
  – Tibetan Medicine
Integrative Approaches to Whole Systems

- Functional Medicine
- Homeopathy
- Naturopathy
- Osteopathy
What is Integrative Medicine?

• Incorporating complementary approaches in mainstream medical care – NCCIH

• The natural progression of the biopsychosocial model of care

• “Just Good Family Medicine”
Where is Integrative Medicine Practiced?

- Integrative Medicine Centers
- Specialty Offices
- Hospital Based Clinic
- FQHCs
- Private Practice
- Inpatient at Hospital
  - Acupuncture, healing touch, reiki, massage
Where is Integrative Medicine Practiced?

- The Internet
Public Health Relevance

• In 2012:
  – 33.2% of US adults used complementary health approaches
  – 11.6% of US children ages 4-17 used complementary health approaches
  – Spending on complementary health approaches – $30.2 billion per year*

From the National Health Interview Survey 2012
10 most common complementary health approaches among adults—2012

- Natural Products* 17.7%
- Deep Breathing 10.9%
- Yoga, Tai Chi, or Qi Gong 10.1%
- Chiropractic or Osteopathic Manipulation 8.4%
- Meditation 8.0%
- Massage 6.9%
- Special Diets 3.0%
- Homeopathy 2.2%
- Progressive Relaxation 2.1%
- Guided Imagery 1.7%

* Dietary supplements other than vitamins and minerals.

Public Health Relevance
Supplements Gone Bad

Red Yeast Rice by Doctor’s Best: Recall - Undeclared Lovastatin

[Posted 06/24/2014]

FDA News Release

FDA warns against the use of homeopathic teething tablets and gels

For Immediate Release September 30, 2016
Public Health Relevance

[USP Logo]

[GMP Logo]
Diabetes Trends 1980 - 2014
Obesity Trends 1997 - 2015

Figure 6.1. Prevalence of obesity among adults aged 20 and over: United States, 1997-September 2015

NOTES: Data are based on household interviews of a sample of the civilian noninstitutionalized population. Obesity is defined as a body mass index of 30 kg/m² or more. The measure is based on self-reported height (m) and weight (kg). Estimates of obesity are restricted to adults aged 20 and over for consistency with the Healthy People 2020 (3) initiative. The analyses excluded people with unknown height or weight (about 8% of respondents each year). See Technical Notes for more details.

DATA SOURCE: CDC/NCHS, National Health Interview Survey, 1997-September 2015, Sample Adult Core component.
Public Health Relevance

• In 2010 70% of the top causes of death in US were chronic diseases

• Underlying causes of these are Biopsychosocial

• We need to support patient’s health and vitality
Where Can I Find Evidence for Integrative Therapies?

- Natural Medicines (Formerly Natural Standard)
  - [https://naturalmedicines.therapeuticresearch.com/](https://naturalmedicines.therapeuticresearch.com/)

- Consumer Lab
  - [http://www.consumerlab.com/](http://www.consumerlab.com/)
Where can I find information for patients?

- University of Wisconsin Integrative Medicine Department
  - https://www.fammed.wisc.edu/integrative/modules

- Integrative Medicine for the Underserved
  - http://im4us.org/Home
Integrative Medicine in Practice

• How does this translate for patients?

• It depends on the patient...
Case #1

• 37yo man presents to the clinic with:
  – anhedonia
  – trouble sleeping
  – anorexia
  – decreased concentration and guilt for the past 3-4 months she estimates.
Case #1

“There’s no way I’m taking prozac or anything like that. My best friend took it and had the WORST headaches, and also, you know, wasn’t as interested in the bedroom. I don’t have time in my schedule for counseling. Aren’t there any natural treatments for depression?”
Case #1

- Meditative Breathing
- Vitamins – D and B complex
- Fish Oil
- EXERCISE!!!
Case #2

• 50yo woman
• Hx of TBI, lives with chronic back pain
• Wants to avoid opioids, takes minimal medications
• Can’t afford massages
• Sees chiropractor occasionally, but last time made her pain worse
Case #2

• Hands on treatment with cranial osteopathy
Case #3

• 51 yo woman presents to your office with increasingly irregular bleeding (last menses 2.5mo ago), hot flashes, headaches, insomnia. She is worried about her lack of estrogen, but has heard about the risks of hormone replacement and asks about potential supplements or herbs that could treat her symptoms.
Case #3

- Vitamin E 800iu daily until flashes decrease, then 400iu daily

- Flax Seed - 2 Tbsp (approx 15-20g) GROUND flax seed BID

- Meditative Breathing
Case #4

• 63yo man with diabetes mellitus
  – Hemoglobin A1C 7.3 -> 8.3 -> 10.5

Takes 2g metformin daily, and does not want to add a medication or start insulin
Case #4

• Diet Diary

• In 6mo his A1C came down to 7.5 and has stayed there since
Integrative Medicine in Practice

Figure 3. A model for evidence-based clinical decisions.
Let’s get Rochester on the Map
Thank You!
Questions

Mind Full, or Mindful?
References

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• http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm523468.htm FDA Warns Against the Use of Homeopathic Teething Tablets and Gels. FDA press release 9/30/16.
• Many uncited websites for pictures, they are not mine
• Much of the data on Public Health Trends from CDC directly.