Integrative Medicine (Formerly known as CAM)

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Goals and Declarations

1) To define Integrative Medicine
2) To recognize the Medicine Wheel of Health

Declarations: None
Disease

- A disorder of structure or function in a human, animal, or plant, especially one that produces specific signs or symptoms or that affects a specific location.
Disease

- Conventional Western Medicine defines disease in terms of measurement, labs, x-rays, examination, etc.

- Examination and test result abnormalities lead to a diagnosis of a disease which then becomes the focus of treatment.

- The goal of treatment is to correct the abnormalities in the function and/or structure of body organs and systems.
Illness

- Illness is what the patient experiences: the effect of disease on their life
- Illness is a discrepancy between states of being and perceived role performances.
- Not necessarily reflected in test results
Integrative Medicine

• Reaffirms the importance of the relationship between practitioner and patient
• Focuses on the whole person,
• Is informed by evidence
• Makes use of all appropriate therapeutic approaches, healthcare professionals, and disciplines to achieve optimal health and healing

Kliger, Maizes 2004
Conventional Medicine
• Focuses on treatment of physical disease

Alternative Medicine
• substitute for mainstream care

Integrative Medicine/Complementary therapies
• used together with mainstream care for management of symptoms and improve quality of life.
Integrative/Integrated Medicine

Combines treatments from conventional medicine and CAM for which there is some high-quality scientific evidence of safety and effectiveness.
Program in Integrative Medicine
University of Arizona

- Botanical Medicine
- Nutrition
- Manual Medicine
- Mind-Body Medicine
- Energy Medicine
- Spirituality
- Exercise

- Alternative Medical Systems
  - Traditional Chinese Medicine
  - Ayurveda
  - Homeopathy
  - Naturopathy
Patient Reasons for Using CAM (My Observation)

- Bad experience with conventional medicine either personally or loved one
- Medical condition not treated by conventional medicine to their satisfaction
- Intense personal interest in their own health and preventive medicine
Goal of Integrative Medicine Consult

- Review of medical condition(s)
- Review of patient’s CAM therapy use
- Review of potential interactions with conventional therapies
- Review of additional alternative therapies
- Review of basic health care issues
  - Nutrition
  - Exercise
  - Stress reduction
Big Business

CAM as a Portion of the $2.2 Trillion in U.S. Healthcare Costs in 2007

CAM Service Revenues
2%

National Healthcare Expenditures
98%

Source: Nutrition Business Journal estimates. Healthcare estimates derived from data provided by the U.S. Centers for Medicare & Medicaid Services
## 2007 Integrative/CAM Medicine Service Revenues and Supplement Sales

<table>
<thead>
<tr>
<th>Practitioner Type</th>
<th>Licensed/Lay Practitioner Pop.</th>
<th>CAM Service Revenues</th>
<th>Supplement Sales</th>
<th>Supplement Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chiropractic</td>
<td>79,730</td>
<td>$18,490</td>
<td>$444</td>
<td>24%</td>
</tr>
<tr>
<td>Traditional Chinese Medicine</td>
<td>33,950</td>
<td>$4,770</td>
<td>$367</td>
<td>20%</td>
</tr>
<tr>
<td>Acupuncture</td>
<td>35,710</td>
<td>$4,250</td>
<td>$137</td>
<td>7%</td>
</tr>
<tr>
<td>Homeopathy</td>
<td>9,280</td>
<td>$740</td>
<td>$127</td>
<td>7%</td>
</tr>
<tr>
<td>Massage Therapy</td>
<td>298,330</td>
<td>$10,250</td>
<td>$70</td>
<td>4%</td>
</tr>
<tr>
<td>Naturopathy</td>
<td>27,340</td>
<td>$2,200</td>
<td>$343</td>
<td>19%</td>
</tr>
<tr>
<td>Ayurveda</td>
<td>1,630</td>
<td>$130</td>
<td>$29</td>
<td>2%</td>
</tr>
<tr>
<td>Osteopathy</td>
<td>53,690</td>
<td>$160</td>
<td>$32</td>
<td>2%</td>
</tr>
<tr>
<td>Nurses/MDs</td>
<td>700,870</td>
<td>$200</td>
<td>$279</td>
<td>15%</td>
</tr>
<tr>
<td>Others</td>
<td>22,680</td>
<td>$750</td>
<td>$16</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,263,210</strong></td>
<td><strong>$42,780</strong></td>
<td><strong>$1,844</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Source: Nutrition Business Journal annual estimates derived from association data, interviews, census data, supplement manufacturer surveys and other sources. ($mil, consumer sales; practitioner population presented in thousands)*

by Patricia M. Barnes, M.A., and Barbara Bloom, M.P.A., Division of Health Interview Statistics, National Center for Health Statistics; and Richard L. Nahin, Ph.D., M.P.H., National Center for Complementary and Alternative Medicine, National Institutes of Health
CAM Use by US Adults and Children, (past 30 days)

- Adults (2007): 38.3%
- Children (2007): 11.8%
10 Most Common CAM Therapies Among Adults 2007

Therapies with significant increases between 2002 and 2007 are:

- Deep breathing: 11.6% in 2002, 12.7% in 2007
- Meditation: 7.6% in 2002, 9.4% in 2007
- Massage: 5.0% in 2002, 8.3% in 2007
- Yoga: 5.1% in 2002, 6.1% in 2007
CAM Use by Age 2007

<table>
<thead>
<tr>
<th>Age</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>7.6%</td>
</tr>
<tr>
<td>5-11</td>
<td>10.7%</td>
</tr>
<tr>
<td>12-17</td>
<td>16.4%</td>
</tr>
<tr>
<td>18-29</td>
<td>36.3%</td>
</tr>
<tr>
<td>30-39</td>
<td>39.6%</td>
</tr>
<tr>
<td>40-49</td>
<td>40.1%</td>
</tr>
<tr>
<td>50-59</td>
<td>44.1%</td>
</tr>
<tr>
<td>60-69</td>
<td>41.0%</td>
</tr>
<tr>
<td>70-84</td>
<td>32.1%</td>
</tr>
<tr>
<td>85+</td>
<td>24.2%</td>
</tr>
</tbody>
</table>
Most Common Diseases/Conditions for Which Adults used CAM 2007

- Back Pain: 17.1%
- Neck Pain: 5.9%
- Joint Pain: 5.2%
- Arthritis: 3.5%
- Anxiety: 2.8%
- Cholesterol: 2.1%
- Head or Chest Cold: 2.0%
- Other: 1.8%
- Musculoskeletal: 1.6%
- Severe Headache or Migraine: 1.6%
- Insomnia: 1.4%
Patient Complaint:
“Tired and can’t lose weight”

- 28 y/o woman
- 105 kg, 160 cm, BMI 40
- Hypertension BP 164/98
- Fasting Glucose 165
- Hyperlipidemia
- Smokes 1 ppd, 10 pk-yrs
- TSH 9.8
Patient:  
Conventional Treatment Plan

- Diet- low calorie, low salt, lipid lowering
- Exercise program
- Thyroid replacement
- Metformin
- ACE inhibitor
- Instruct in use of home glucose monitoring
- See her in 4 weeks
Patient: 
Conventional Treatment Plan

• Diet- low calorie, low salt, lipid lowering
• Exercise program
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Will this work?
The Medicine Wheel
The Medicine Wheel
Physical Health

- The Conventional Medical program
- Disease Focused
Emotional Health

- Interface of Stress and Health through the sympathetic nervous system.
- “Fight or Flight”
- Saber-tooth Tiger analogy
- Patient rates stress level from 1 to 10, low to high
Patient 1

Rates present stress level as 8/10

- Unemployed
- 2 children under 6 years old
- Single parent
- Limited finances
Patient 1

Past stressors-

Childhood

- Alcoholic mother
- Sexually abused by family member beginning at age 12
- Weight gain began with abuse
The Medicine Wheel
- Emotional Health

Mind-Body Techniques - Used to reduce, control physiologic response to stress.

- Prayer
- Meditation
- Yoga, Tai Qi, Qi Gong
- Biofeedback
- Breathing Techniques
- Exercise
Patient 1: Emotional Health

- Needs method of stress reduction
- Needs counseling to address childhood abuse
- Cognitive Behavioral Therapy
- External support
  - Family
  - Social Services
The Medicine Wheel
- Mental Health

Neurochemistry
- Target symptoms
  - sleep
  - appetite
  - concentration
  - energy
  - sex drive
  - hope
- Anxiety - separate biochemical disorder
- Treatment - antidepressants, correct sleep disorder
Patient 1: Mental Health

- Non-restorative sleep
  - Snores, sleepy during daytime
- Increased appetite, craves carbohydrates
- Poor energy, difficulty completing daily activities of daily living.
- Poor concentration
- Absent sex drive
- Sees little hope in life
Patient 1: Mental Health

- Sleep study to r/o obstructive sleep apnea
- Metabolic evaluation for DM, thyroid
- Psychiatric evaluation for Depression
The Medicine Wheel
Spiritual Health

- History question:
  - Do you have a spiritual part of your life that’s helpful to you?
  - What gives your life meaning?
- Defined by the patient.
- May be religious but not necessarily so
Spiritual Effect of Illness

- **The Ideal** - State of health when one is able to do what is needed to feel fulfilled and give life meaning.
- **Developed during period of health**
  
  “Spiritual Crisis”

- **The Reality of illness** - State of health with illness/disability. When one is unable to do the things that give life meaning.
Patient: Spiritual Health

- Religious belief but not involved in a community
- Dreams of being a teacher
- Fiercely protective of children
We do not live our lives in isolation; our community should be supportive to our health as we are to theirs. Community is the background to the Medicine Wheel.
Community

We do not live our lives in isolation; our community should be supportive to our health as we are to theirs. Community is the background to the Medicine Wheel.
Conventional Treatment Plan

- Diet: low calorie, low salt, lipid lowering
- Exercise program
- Thyroid replacement
- Metformin
- ACE inhibitor
- Instruct in use of home glucose monitoring
- See her in 4 weeks
Patient 1: Integrative Plan: in addition to Conventional plan

- Exercise
- Mediterranean Diet
- Stress reduction
- Cognitive Behavioral Therapy
- Counseling about childhood abuse
- Community support
  - Family
  - Church
  - Social Services
- Sleep evaluation
- Psychiatric Evaluation for Depression
- Counseling to address plans for future
- How will she get there?
- Need for hope, sense of fulfillment
Summary

• Conventional Western Medicine tends to focus on patient’s disease.

• Integrative Medicine addresses many aspects of health to help the patient reach the highest level of health regardless of the patient’s diseases.

• The basic elements of health are exercise, nutrition, and stress reduction.