Yoga -- Balancing your body with life

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Evolution of yoga

• 4500-2500 BC: The Vedas (Hindu sacred scriptures) were spoken by the gurus and passed down.

Lead me from the unreal to the Real.
Lead me from darkness to Light.
Lead me from death to immortality.
Om, peace, peace, peace

Yoga as part of integrative health
• A sage named Patanjali develops the yoga-sutra around 100 AD. 3 main ideas
  1. purification of body
  2. purification of speech
  3. purification of mind
• Hatha-yoga: the postures and breathing exercises developed in the fourteenth century from the yoga-sutra
• A key element that distinguishes yoga from gymnastics or calisthenics is the intentional integration of breath, posture, and movement.
Relevane: who is practicing

• Over 15.8 million people practice yoga (Darcy, 2008)
• Target: everyone
  – Toddlers/children
  – Pregnant women
  – Aging population/geriatrics
  – Those with chronic conditions
    • Orthopedic – arthritis, LBP, fibromyalgia
    • Neurologic – MS, stroke
    • cardiopulmonary
• Over 70,000 trained yoga teachers in US (varying skills)
Relevance to Medicine

- Flexibility, joint stability, coordination, balance
  - Proprioception
- Immune function
- Balance autonomic systems
  - Blood Pressure
  - Improves psychological health- decreased anger, hostility
- Posture

- Lung function
- Nourishes intervertebral disks
- Function of feet
- Aerobic conditioning
- Relaxes CNS
  - Stress/cortisol
- Reduces chronic pain

Yoga as part of integrative health
Breathing techniques

• Conscious deep breathing, guide into different parts of lungs
• Ujayi “victorious breath” slight closure of vocal cords – back pressure opens alveoli
• Viloma: pauses during inhaling or exhaling
• Nadhi Shodanam: inhale through one nostril, then exhale through other nostril
  – Right stimulates sympathetic system, left elicits parasympathetic system
Breathing Exercise

• Sit comfortably, eyes closed, aware of your breath, imagine top of a mountain with clear, cool air. Focus!

• Breathe in slowly and deeply, expand stomach (diaphragm breathing)

• Hands on rib cage, breathe into ribs

• Arms at side, breathe in as raise arms; breathe out as lower.

• Breathe in through nose, constrict throat as breathe out (like Darth Vadar)
Research and cancer

• Statistically significant reduction in stress, sleep quality, mood, cancer-related distress and symptoms, and improved quality of life (A.B. Moadel, Hall, & Sparano, 2007)
  – regular practice of yoga teaches the patient a routine that can help maintain strength, flexibility, balance and a state of relaxation that would help coping with physical, psychosocial, and spiritual distress during rigorous treatments.
Consistent practice

- Research on patients with breast cancer undergoing radiation and chemotherapy
  - Performed yoga 5 days per week
  - Significant improvement in fatigue scores over the 12 week course of treatment
  - Maintained the improvement at the 3-month post-intervention follow-ups
Let’s practice some yoga postures
Mountain Pose

• Stand with your feet solid on the ground
• Neutral pelvis
  – (neutral between flat back and lordosis)
• Lift breast bone & broaden across shoulders
  – Shoulders relax down
  – Shoulder blades flat against back
  – Soften the front of your rib cage
• Head is balanced on top
  – Chin parallel to floor
Upward Salute

- Stand in Tadasana. With an inhale, sweep your arms out to the sides and up toward the ceiling.
- If possible without hunching your shoulders forward, press your palms firmly together by, touching the bases of your palms first, then the palms themselves, and finally the fingers.
- Extend your elbows fully and reach up through your pinkies so your thumbs turn slightly down toward the crown of your head. Making sure not to compress the back of your neck, tip your head back slightly and gaze at your thumbs.
- Don't let your lower front ribs protrude forward. Bring your front ribs down (toward your pelvis) and in (toward your spine), and lengthen your tail bone toward the floor. Then lift your rib cage evenly away from your pelvis to stretch the circumference of your belly. Hold for a few breaths.
- Exhale and as you sweep your arms out to the sides.
• Find the table top position, with your hands spread wide under your shoulders and your knees under your hips.
• Inhale fully through your nose, and exhale, lifting your hips up to the sky.
• Draw the shoulders away from the earlobes and shake your head out, making sure you feel no tightness in the neck or head.
• Engage your front and back of your thighs, as in the mountain pose. Roll the thighs in, reach your tailbone back toward the back of the mat. Hang here and breathe.
Sitting trunk rotation

• Sit sideways on your chair
• Rotate at your waist to face the back of your chair.
• place your hands on the back of the chair to assist with the turn.
• Spread across the front of your shoulders, keep shoulders down, flattening the shoulder blades against the ribs.
• Look behind you.
• Inhale and rotate a little farther.
Tree pose

• Standing, bend right leg at the knee.
• Place right heal on left leg any place except knee.
• Raise both arms over the head with palms together.
• Breath gently through nose.
• Repeat with other side.
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