Improving lives through programs and services that support independence, community involvement and well-being
AGING WITH A PLAN

Professor Sharona Hoffman

Case Western Reserve University School of law
TOPICS COVERED

- Money Matters: Retirement Expenses, Savings, and Fiscal Decision-Making
- The Benefits of Community Living
- Help with Money, Care, and Home Management
- Essential Legal Planning
- Driving While Elderly
- Care Coordination: Treating the Patient, not Diseases
- Long-Term Care
- Exit Strategies: Maintaining Control at the End of Life
FACTS & FIGURES

- 2015 – 47.8 million 65+ (14.9% of population)
- 2012 – 5.9 million 85+
- 2030 – 72 million 65+ (20% of population)
- Baby boomers born 1946-1964 began turning 65 in 2011
- Alzheimer’s: 5.4 million (2016)
  - 13.9% of 71+ have dementia
LEGAL DOCUMENTS

- 41% of baby boomers don’t have wills
- Wills, trusts, payment or transfer on death
- Durable power of attorney for property & finances
  - Provide lists of assets & where important documents are
- Durable power of attorney for health care
Medical Care

- Only 7-15% of people die “sudden death”
- 45% of 65+ have 2 or more chronic conditions
- Seniors see average of 4 specialists
  - Fragmented care vs. coordinated care
- Only 7,500 geriatricians in 2013
- Internists?
Be a member of your own medical team

- Ask questions
- Involve trusted advocates
- Have conversations with loved ones re: end of life treatment preferences
Improving lives through programs and services that support independence, community involvement and well-being
Thrive After Fifty

Making Retirement Meaningful
Adult Development
Positive Psychology
Neuroplasticity of the Brain
Quality of Life After Fifty
Adult Development
Theory and research
Eight Ages of Man

Childhood and Society,
Erikson, E., 1950

(Theory, based on clinical experience and reflection)
<table>
<thead>
<tr>
<th>Age Level</th>
<th>Stages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maturity</td>
<td>Ego Integrity v. Despair</td>
</tr>
<tr>
<td>Adulthood</td>
<td>Generativity v. Stagnation</td>
</tr>
<tr>
<td>Young Adult</td>
<td>Intimacy v. Isolation</td>
</tr>
<tr>
<td>Adolescent</td>
<td>Identity v. Role confusion</td>
</tr>
<tr>
<td>7-10</td>
<td>Industry v. Inferiority</td>
</tr>
<tr>
<td>4-6</td>
<td>Initiative v. Guilt</td>
</tr>
<tr>
<td>2-3</td>
<td>Autonomy v. Shame/doubt</td>
</tr>
<tr>
<td>1-2</td>
<td>Basic trust v. mistrust</td>
</tr>
</tbody>
</table>
“Mature man needs to be needed...
Generativity, then, is primarily the concern in establishing and guiding the next generation...”


Generativity vs. Stagnation
“For he knows that an individual life is the accidental coincidence of but one life cycle with but one segment of history... In such final consolidation death loses its sting.”

Erikson, 1950, p.268
Ego Integrity vs. Despair
Epigenesis
Epigenesis
The past shapes the future ad infinitum
Stages of the Life Cycle

The Seasons of a Man’s Life

Levinson et. al., 1978

Cohort study (retrospective): 40 men, 10 in each of 4 occupations, ages 35-45 in 1973.
<table>
<thead>
<tr>
<th>Age Range</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>70+</td>
<td>Late Adult Era</td>
</tr>
<tr>
<td>60-65</td>
<td>Late Adult Transition</td>
</tr>
<tr>
<td>55-60</td>
<td>Culmination of middle adulthood</td>
</tr>
<tr>
<td>50-55</td>
<td>Age 50 Transition</td>
</tr>
<tr>
<td>45-50</td>
<td>Entering Middle Adulthood</td>
</tr>
<tr>
<td>40-45</td>
<td>Mid-Life Transition</td>
</tr>
<tr>
<td>33-40</td>
<td>Settling Down</td>
</tr>
<tr>
<td>28-33</td>
<td>Age 30 Transition</td>
</tr>
<tr>
<td>22-28</td>
<td>Entering the Adult World</td>
</tr>
<tr>
<td>17-22</td>
<td>Early Adult Transition</td>
</tr>
<tr>
<td></td>
<td>Childhood &amp; Adolescence</td>
</tr>
</tbody>
</table>
The Arc of Life
Differences in Adaptive Mechanisms

Adaptation to Life
Vaillant, G., 1977

Longitudinal study: 268 Harvard undergraduates during 1939-42, followed for 35 years
Adaptive Ego Mechanisms
Vaillant, G. 1977

Mature
- Sublimation
- Suppression
- Anticipation
- Altruism
- Humor

Neurotic
- Intellectualization
- Repression
- Displacement
- Dissociation
- Reaction formation
Less effective adaptive ego mechanisms
Vaillant, G. 1977

**Immature**
- Fantasy
- Projection
- Hypochondriasis
- Passive-aggressive behavior
- Acting out

**Psychotic**
- Denial of reality
- Distortion
- Delusional projection
The Managerial woman
(Hennig and Jardim, 1976)
What are the basic elements of success?

- 25 female CEO’s of Fortune 500 companies in 1970 compared to matched sample of women who did not make it to the top.
- Strong relationship with father
- Oldest or only child, no brothers
- Strong friendships with men
- Hard, hard workers (harder than male cohorts)
- Rejection of feminine roles through age 30
- **Moratorium**: 2 years withdrawal, allowing fuller expression of self, including femininity, between 35-40 years of age.
What do women want?
Duff, N., 1980, Early Adult Development in Women: The case of the woman attorney.

- 15 women attorneys, 5 at each of three stages: mid-twenties, mid-thirties, mid-forties.
- What do you want out of life?
- “Good personal relations” is consistently highest-ranked priority at all three ages. “achievement and work rewards” is as high in the thirty’s group, but significantly lower than the others in the younger and the older groups.
Adult Development Metaphors

Stack of coins

Tapestry
Positive Psychology
Developing well-being in general
Flourish: A Visionary New Understanding of Happiness and Well-being
Seligman, M., 2011

Father of Learned Helplessness theory
Flourish: A Visionary New Understanding of Happiness and Well-being
Seligman, M., 2011

- Positive emotions
- Engagement
- Meaning
- Accomplishment
- Positive relationships
Seligman, more on flourishing

- Positive emotions
- Engagement
- Meaning
- Accomplishment
- Positive relationships

- Homo Prospectus: consideration of the future (5/22/17, NYT)
GRIT: The Power of Passion and Perseverance (Duckworth, 2016)

Passion and perseverance matter more than innate talent

Effort counts twice:
talent x effort = skill;
skill x effort = achievement

Measure of current grit: https://www.sas.upenn.edu

Grit can be developed; it is not an inborn trait

Grow your own grit: interest, deliberate practice, purpose, hope
Age and Grit

What do you think?
The Happiness Advantage: 7 principles

S. Achor, 2011

- Happiness leads to success, so cultivate happiness
- If disappointed, change your expectations
- Looking for the positive is a habit (3 good things)
- Setbacks make me stronger
<table>
<thead>
<tr>
<th><strong>Start</strong></th>
<th>Start small to build successes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Make</strong></td>
<td>Make starting easy</td>
</tr>
<tr>
<td><strong>Get</strong></td>
<td>Get support from others</td>
</tr>
</tbody>
</table>
Neuroplasticity of the Brain

Findings from fMRI and PET scan studies
Research on visible changes in brain

- Obsessive-compulsive disorder before and after treatment
- Dyslexia before and after remediation
- London cabbies and matched controls
- Meditators before and after training and long-term practice
- Drug addicts before and after long-term recovery
The driver of all or any of these changes is
Your own Behavior
Predictors of Quality of Life (well-being, thriving, flourishing) after midlife

Current research findings
What leads to well-being?

- Physical fitness
- Love relationships
- Social support
- Cognitive challenge
- Meditation: Meaning beyond human existence

An amalgam of research findings
Exercise benefits

- Decreased mortality at any age
- Improved cognitive functioning (memory)
- Cardiovascular resilience (blood pressure, endurance)
- Muscle strength: decreased falls, increased energy
- Skeletal: Bone strength, joint relief
- Metabolic activity: mitochondrial energy expansion
- Endocrine: Blood sugar regulation
- Immunity enhancement
- Decreased Obesity
- Mental Health: self confidence, feeling good
Most of the leading causes of death in our society are directly related to lifestyle behaviors. When these behaviors are examined separately, tobacco and diet/physical inactivity were found to be the biggest contributors. Data from McGinnis et al., 1993.
Cognitive Functioning

Medina, J., Brain Rules, 2012?

YOUR BRAIN LOVES THE GYM
(OR SIDEWALK, BIKE TRAIL, POOL, . . .)

**When you Exercise...**

- Norepinephrine is released, improving attention, perception and motivation.
- Brain-derived neurotrophic factor (BDNF) is released, protecting and repairing neurons from injury and degeneration.
- Hormones combine with BDNF to grow brain cells, regulate mood and provide mental clarity.
- The hippocampus, a part of the brain concerned with learning and memory, grows in size with regular exercise over time.

- Blood flow to the brain increases, delivering more oxygen and nutrients and improving waste removal.
- Serotonin is released, enhancing mood.
- Endorphins are released, dulling the sensation of pain.
- Dopamine is released, improving motivation, focus and learning.
Cellular level effects
(NYT Magazine, 3/26/17, p.22, from Cell Metabolism, Nair, S., Mayo Clinic)

1. None or no more than regular, daily activities vs.:

2. Moderate: 30 minutes 3 times a week
   - Improved fitness, blood sugar regulation

3. Weight lifting: light to strenuous
   - Improved muscle mass and strength

4. Interval: short, intense periods alternate with short rests, 3 times a week
   - Improved endurance
   - Improved ability of muscle cell mitochondria to produce energy, more so in older individuals than younger
Physical exercise risks...

- Muscle and/or skeletal injury
- Cardio-vascular over-strain
...and remedies, as benefits outweigh risks

<table>
<thead>
<tr>
<th>Start</th>
<th>If sedentary, start slowly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visit</td>
<td>Visit physician for approval</td>
</tr>
<tr>
<td>Begin</td>
<td>Begin with experienced trainer or physical therapist</td>
</tr>
</tbody>
</table>
All you need is Love

- Vaillant
- The Bible
- The Beatles
- Levinson
- Hennig and Jardim
In the Grant Study, love later in life could neutralize the effects of a toxic childhood.
Social Connectedness

Scrutton, J. and Creighton, H., 2015
Figure 6: Life satisfaction and social isolation over time among older people (Shankar et al)
Figure 9: Social network size and quality of life among older people (Rafnsson et al)
Effects of cognitive training

Karlene Ball, PhD; Daniel B. Berch, PhD; Karin F. Helmers, PhD; et al. (2002)
2802 people in RCT study, 3 interventions and a control

- Memory training
- Reasoning training
- Processing speed training
- No intervention

- Outcomes at immediate, 1 year, 2 years:
  - These skills
  - Practical, daily life tasks
Figure 2. Cognitive Outcomes: Mean Scores Across Time by Group

- Memory
- Reasoning
- Speed
- Control

Memory Proximal Composite

Reasoning Proximal Composite

Speed Proximal Composite

Adjusted Scores

Baseline, Posttest, First Annual, Second Annual Evaluation
Other outcomes

Daily living tasks: immediate, after 1 year, 2 years

No significant findings (yet?)
Meditation
Findings in peer-reviewed, scientific literature
Changes in brain state during meditation (EEG findings)

- Increased alpha waves
- Increased theta waves
- Decreased beta waves
- Decreased delta waves
Meditation’s long term effects: retention of gray matter
Increased gray matter density

Brain stem (cardio-respiratory control)
Insula and sensory regions (sensory awareness, cushions reactivity)
Frontal cortex (executive functioning)
Left hippocampus (learning, memory, emotional regulation)
Temporo-parietal junction (empathy, perspective, compassion)
Anterior cingulate cortex (self and emotion regulation)
Functional changes due to long term practice of meditation:

- Improved emotional regulation
- Better, more rational assessment of sensory information
- Deactivation of self-referential processing
- Enhanced empathy and larger perspective
- Improved memory and learning
- Better attentional processing
- Increased positive affect
- Stress reduction
- Improved immunity
- Improved cardiorespiratory functioning
Meditation and Spirituality
Herbert Benson, 1975

- Cardiologist at Harvard
- Stress is linked to high blood pressure
- TM meditators asked to be studied: measured drops in heart rate, breathing rate, metabolic rate while meditating and blood pressure overall.
- The Relaxation Response: best seller, still in print
- Employed it himself after 20 years
- Collaborations with religious leaders, Dalai Lama, Christian leaders
- Always with choice of religious or secular approach
Spiritual Evolution
Vaillant, G., 2008

- Faith, Love, Hope, Joy, Forgiveness, Compassion, Awe

Seven Positive Emotions, neurobiological findings place them in pathway from brainstem through insula to medial prefrontal cortex.

Is this Ego Integrity?
## Recommendations: the obvious, unaddressed here

<table>
<thead>
<tr>
<th>Manage</th>
<th>Manage your finances (Sharona Hoffman, <em>Aging with a Plan</em>, 2015)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eat Well</td>
<td>Revisit your nutrition plan (Nutrition Action Newsletter, CSPI)</td>
</tr>
<tr>
<td>Clarify</td>
<td>Clarify your wishes (<a href="http://www.agingwithdignity.org">www.agingwithdignity.org</a>)</td>
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</tbody>
</table>
Dr. Nancy’s Top Five Vehicles to Flourish after 50:
Dr. Nancy’s Top Five Vehicles to Flourish after 50:

5. Challenge your mind
Dr. Nancy’s Top Five Vehicles to Flourish after 50:

4. Cultivate love relationships
5. Challenge your mind
Dr. Nancy’s Top Five Vehicles to Flourish after 50:

3. Develop social support network
4. Cultivate love relationships
5. Challenge your mind
Dr. Nancy’s Top Five Vehicles to Flourish after 50:

2. Exercise
3. Develop social support network
4. Cultivate love relationships
5. Challenge your mind
Dr. Nancy’s Top Five Vehicles to Flourish after 50:

1. Meditate
2. Become physically fit
3. Develop social support network
4. Cultivate love relationships
5. Challenge your mind
References: Adult Development

References: Positive Psychology

References


- Karlene Ball, PhD; Daniel B. Berch, PhD; Karin F. Helmers, PhD; et al. (2002) Effects of Cognitive Training Interventions With Older Adults A Randomized Controlled Trial. JAMA. 2002;288(18):2271-2281

- Scrutton, J., Creighton, H, (2015), The links between social connectins and well-being later in life, Department of Epidemiology and Public Health at University College London (UCL)


References, continued


Thank you for coming! Watch our website for a copy of tonight’s presentation available for download tomorrow!
www.communitypartnershiponaging.org