# Old Age Agirt and Development Lecture RT. pp. in entire e

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### **Lecture Topics**

- 1. How is aging defined?
- 2. What are the categories of aging?
- 3. What are population trends in aging?
- 4. What is the expected life span?
- 5. What are other important demographic & health statistics?
- 6. What are the trends in minority aging?

- 7. What are health care costs?
- 8. What are socioeconomic issues?
- 9. What are the long-term care issues?
- 10. What are the leading causes of illness, frailty, and mortality?
- 11. What are the key principles of geriatric care?
- 12. What are the biological theories of aging & mortality?
- 13. What are the changes in cognitive abilities with aging?
- 14. What are the psychological theories of aging?
- 15. What are the social theories of aging?

### 1. How is aging defined?

- 1. <u>Biologically</u>: biological aging cannot be precisely defined. However, based on markers of disease, disability, and functional decline, Hazzard (2001) defined true old age as "above 75 years."
- 2. Physical characteristics
- 3. Chronologically: by age in years

#### 2. What are the categories of aging?

**65-75** 

•"Young-old"

•"Old-old" 75+

•"Oldest-old" 85+

•Centenarian 100+

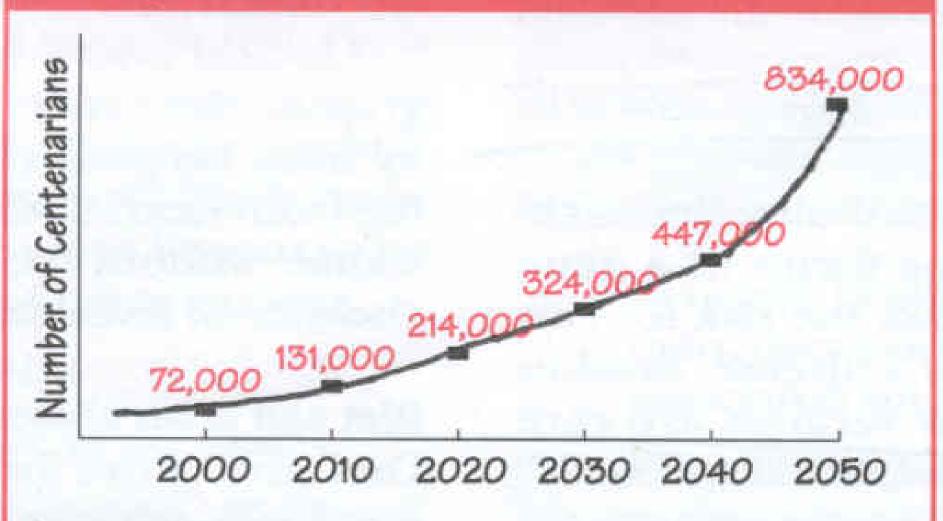
•Supercentenarian 110+

#### Merle Barwis, 111



There are about 70 super-centenariums in the USA

#### Projected Number of U.S. Centenarians



Source: Midrange estimate from Centenarians in the United States, U.S. Census Bureau, 1999.

#### 3. What are the population trends with respect to aging?

The Elderly in the United States: Trends

|             |      |      | Percent | of total po | pulation |      |      |
|-------------|------|------|---------|-------------|----------|------|------|
| Age         | 1910 | 1940 | 1970    | 1980        | 1990     | 2010 | 2030 |
| 65+         | 4.3  | 6.8  | 9.9     | 11.3        | 12.3     | 12.6 | 18.3 |
| 65-74       | 3.0  | 4.8  | 6.1     | 6.9         | 7.3      | 7.1  | 10.6 |
| <b>75</b> + | 1.3  | 2.0  | 3.8     | 4.4         | 5.0      | 5.5  | 7.7  |

Note: Future dates assume (1) a fertility level of 2.1 children born per woman and (2) that mortality rates decrease at a rate whereby life expectancy at birth increases by about 0.05 percent per year.

- In 2010 census there were approximately 40 million persons age 65+ (13 % of population)
- In 2025 there will be approximately 63 million persons age 65+ (19% of population)



#### 4. What is the expected life span?

| Age in | Aver<br>Expects |        |   |
|--------|-----------------|--------|---|
| 2008   | Maie            | Female |   |
| 65     | 17              | 20     |   |
| 70     | 13              | 16     | 4 |
| 75     | 10              | 12     |   |
| 80     | 8               | 9      |   |
| 85     | 6               | 7      |   |
| 90     | 4               | 5      |   |

#### Average Life Expectancies in Years by Race

|            | white male | black male | white female | black female |
|------------|------------|------------|--------------|--------------|
| At birth   | 75.7       | 69.7       | 80.6         | 76.5         |
| At age 50  | 29         | 25.2       | 32.6         | 30.2         |
| At age 65  | 17.1       | 15.1       | 19.8         | 18.6         |
| At age 80  | 7.8        | 7.7        | 9.3          | 9.3          |
| At age 100 | 2          | 2.7        | 2.2          | 2.8          |

Note: Black – White "mortality crossover effect" after age 80 when racial differences disappear and eventually Black life expectancy exceeds that of Whites. Older blacks are hearty "survivors".

# The population of the "OLD-OLD" is the most rapidly growing of all age groups

Persons age 85+:

**2000: 4.2 million (1.5% of population)** 

**2010: 6.1 million (2.0% of population)** 

**2025: 7.4 million (2.2% of population)** 

**2050:** 19.3 million (4.8% of population)

459% increase in population of persons age 85+ over the next 50 years

#### 5. What are other important demographic and illness stats?

#### Demographics of Aging

MALE: FEMALE

1:1.5 at age 65 1:2.5 at age 85

LIFE EXPECTANCY @ AGE 65 MALE

17 yrs.

FEMALE 20 yrs.

MARITAL STATUS:

3 Times More Widows

1/2 of Elderly Women Are Widows

LIVING ARRANGEMENTS: 2 Times More Women Live Alone (19% vs 39%) 31% of Elderly Live Alone

ILLNESS:

80% have chronic illness

14% mobility impaired

5% homebound

#### MENTAL ILLNESS (6 mos. Prevalence)

All DSM III Disorder or cognitive impairment 8.8% - 17.8% in National Survey

Cognitive Impairment (alone)

Severe 3.6 - 6.3% Mild 11.5 - 18.4%

Depression (alone) 0.5% - 5.0% (women 2-3x men)

6. What are the trends in minority aging? Minority elderly persons are the most rapidly growing of all demographic groups:

2000: 16% of elderly population are non-whites (Blacks, Hispanics, Asians, Native Americans) or 5.8 million persons

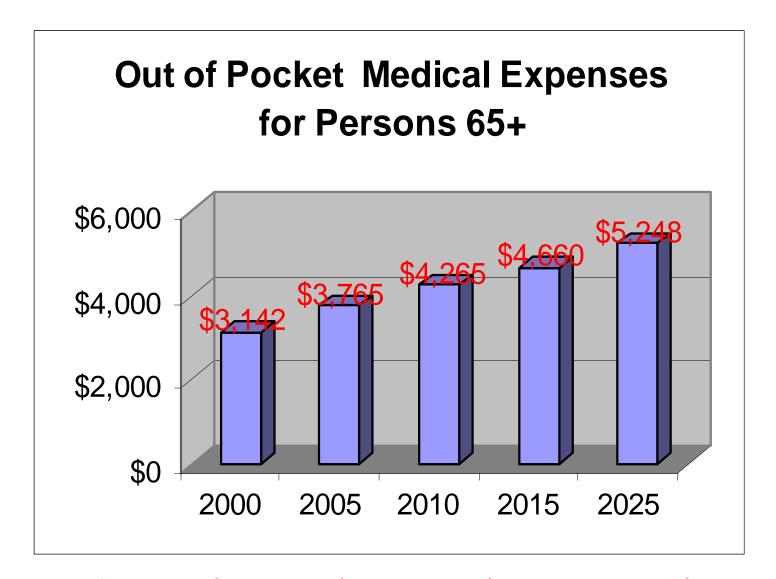
2010: 20% of population is non-white or about 7.7 million persons

2050: 36% of population will be nonwhite or 29.5 million persons

Thus, there will be more than a 5-fold increase over first half of the century

#### 7. What about health care costs?

| Elderly Hea               | ithcare | Costs ·               |    |   |
|---------------------------|---------|-----------------------|----|---|
| • \$ 500 Billion          | Dollars | Spent                 |    |   |
| • \$ 14,000 per           | Elderly | Person                |    | • |
| PAD BY                    | •       | PAID TO               |    |   |
| MediCARE                  | 45 %    | Hospitals             | 42 | * |
| <b>WediCAID</b>           | 12 %    | Physicians            | 21 | * |
| Other 3rd Party<br>Payers | 15 %    | Nursing<br>Facilities | 20 | * |
| Out of Pocket_            | 28 %    | Other                 | 17 | * |



At age 65, a typical married couple will spend nearly \$200,000 on uninsured health costs over their remaining years

#### 8. What are the socioeconomic issues?

# Sources of Aggregate Income (2010)

• Social Security 40%

• Earnings 27%

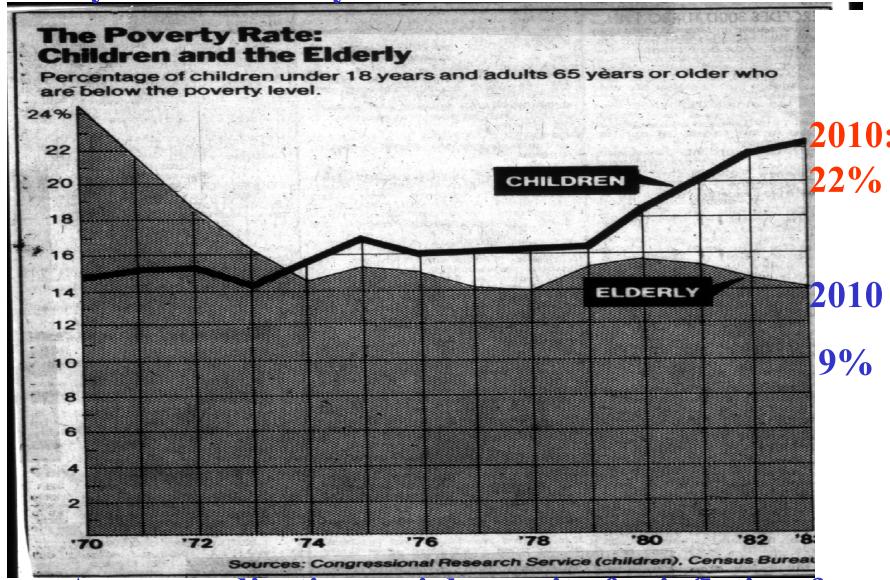
• Pension 20%

• Assets 12%

#### **Median Income and Assets**

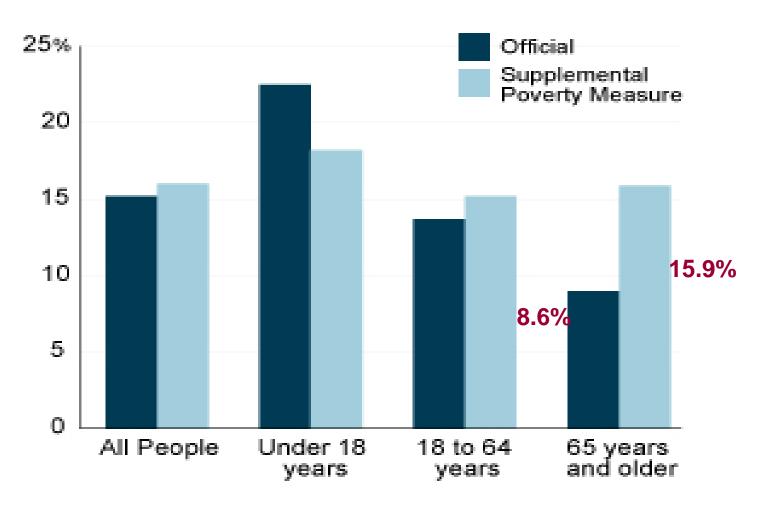
- Men: 55-64 = \$41,200
- Men: >65 = \$25,700
- Women: 55-64 = \$25,500
- Women: >65 =\$15,100
- Median Elderly Income: \$19,167
- Median Elderly New Worth: \$170,000
- Note: The median net worth for elderly Blacks is about one-tenth of elderly Whites

#### Why has the elderly done better than children?



Answer: adjusting social security for inflation & supplemental disability payments

#### Real Poverty Rates



Because of out-of-pocket medical expenses, real poverty rate of elderly is higher than official measures

#### What about poverty and aging?

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Poverty Rates 2008

White 7 %

Hispanic 18 %

Black 20% (Black/Hisp women who live alone=40%

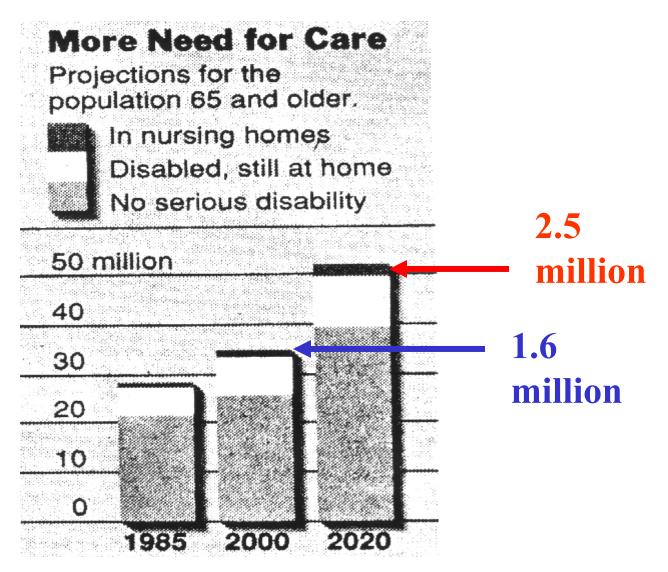
Asian 16%
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- •Poverty level age 65+ = \$10,458 per year(2010).
- •9% of elderly lived in poverty(2010).
- •14.3% of elderly are near poverty(i.e., 125% of poverty level).

#### **Poverty and Gender**

- •Poverty levels are 2x higher in among elderly women than men
- •3/4 of elders below poverty are women
- •More than half of women living in poverty were not poor before the death of their husband. Thus, many older women are "one man away from poverty."

9. What are the issues regarding long-term care?



About 5% of persons age 65<sup>+</sup> are in nursing homes.

# 10 FACTS ABOUT LONG-TERM CARE

New York is an exception and covers care at home

- 1. More than 4 out of 5 American families say they have already experienced a long term care problem or expect to in the near future.
- Approximately 1 in 2 persons 65 and older will spend some time in a nursing home.
- 3. The average cost of nursing home is about \$60,000 per year
- More than half of all nursing home costs are paid by patients and their families out of their own pockets.
- Medicare pays for less than 2% of all nursing home costs.
- Medicaid, with few exceptions, does not cover care in the home or community. And, to get Medicaid help on nursing home costs, you must be completely unable to afford such care and must have exhausted your life savings.
- 7. Almost half of all senior citizens living alone will spend down their income and assets to the poverty level after only 13 weeks in a nursing home.
- 8. 4/5 of the disabled elderly live in the community, not in nursing homes.
- Approximately three fourths of all home care is provided by family members and friends.
- 2 out of 3 caregivers have provided care for at least a year and 4 out of 5 are involved in caregiving seven days a week.

#### **Test Your Knowledge**

1. The elderly(persons 65<sup>+</sup>) now represent about one-eighth of the population 2. By 2025, elderly persons will represent 30% F of the population F 3. At age 65, women can expect to live about 15 years on average 4. The ratio of women to men is 1.5: 1.0 at age 65. 5. About 10% of older persons have severe

dementia

6. About two-fifths of older persons' income comes from social security

7. About 10% of elderly persons are in nursing homes at the current time

10.What are the leading causes of illness, frailty & mortality?

#### Some Leading Causes of Death of Elderly

- Heart Disease
- Cancer
- e Cerebrovascular Disease
- e Alzheimer's and Related Disorders
- e influenza and Pneumonia
- Accidents
   Falls
   Motor Vehicle Accidents
- Suicide

MINU / NU DOM

If we eliminated cardiovascular & cancer, longevity would increase by about 7 & 3 years, respectively.

Although 80% of persons age 65+ have a least one chronic illness, most are not severe.

### Leading Chronic Conditions Elderly Women, by Age

Arthritis
Hypertension
Hearing
Impairment
Cataracts
Cardiac
Ischaemia

Arthritis
Hypertension
Hearing
Impairment
Cataracts
Cardiac
Ischaemia

Arthritis
Hypertension
Hearing
Impairment
Cataracts
Visual
Impairment

Schoolsty S.J. Amer J Publ Health 1986; 75: 754

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## Leading Chronic Conditions Elderly Men, by Age

Men 65-74

Arthritis Hypertension

Hearing Impairment

Cardiac Ischaemia

Tinnitus

Men 75-84

**Arthritis** 

Hearing Impairment

Hypertension

Cataracts

Cardiac Ischaemia

Men 85+

Hearing Impairment

Arthritis Hypertension

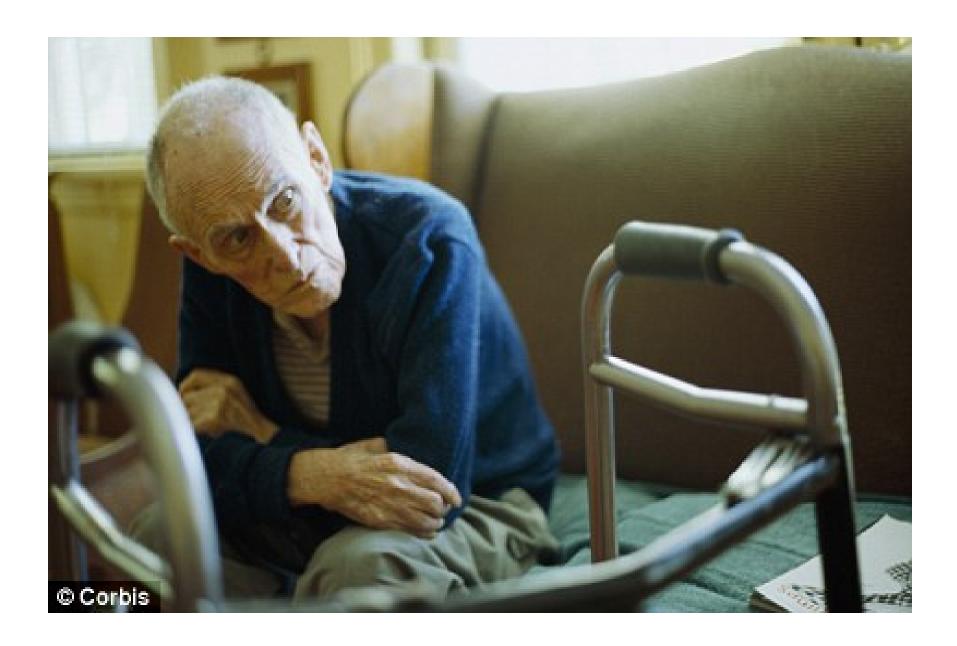
Cataracts

Visual Impairment

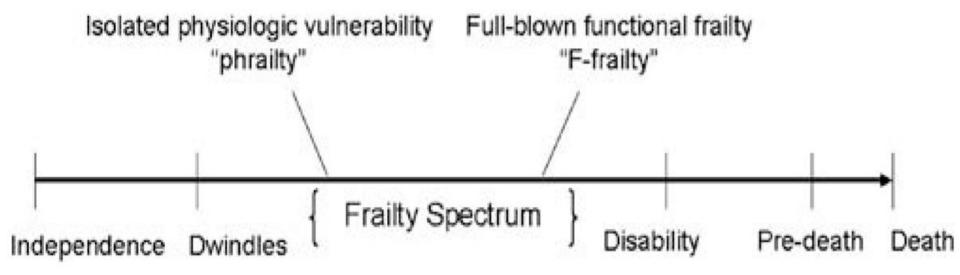
## Frailty Phenotype

- Weakness
- Poor endurance
- Reduced physical activity
- Slow gait speed
- Unintentional weight loss

"Frail" is associated with increased risk for falls, functional decline, and death



# **Frailty**



The spectrum of frailty includes physiologic vulnerability(phrailty) and full-blown functional frailty (F-frailty) sometimes equated as disability.

# Activities of daily Living & Instrumental activities of daily living

#### ADL

- Bathing
- Grooming
- Toileting
- Transfer
- Feeding
- Walking
- Continence

#### **IADL**

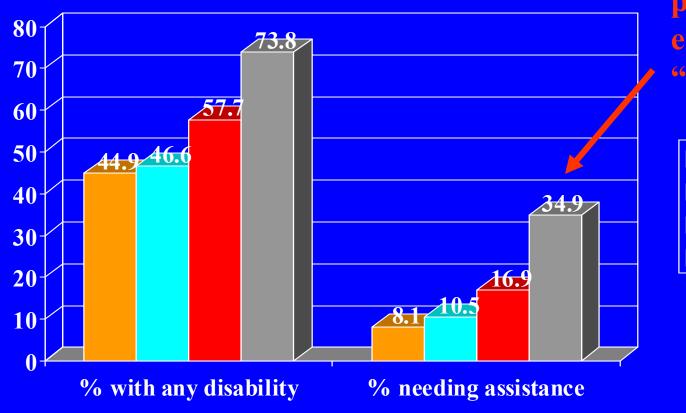
- Shopping
- Using telephone
- Food preparation
- Housekeeping
- Laundry
- Using transportation
- Handling finances

# Disability and aging



**Serious** 

disabilities



Administration on Aging, 2003

#### THE ELDERLY ARE WEAKER!

"Out of Shape" (deconditioned)

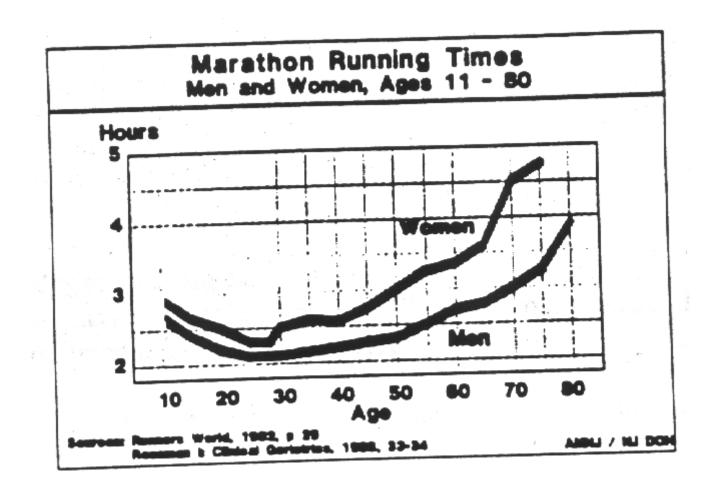
Disease states

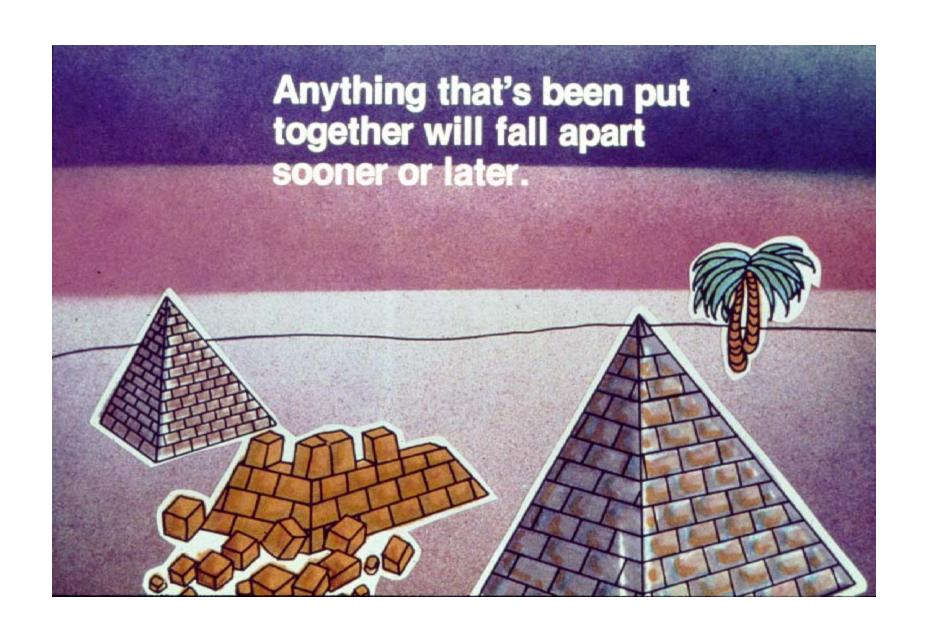
Normal physiological changes of aging

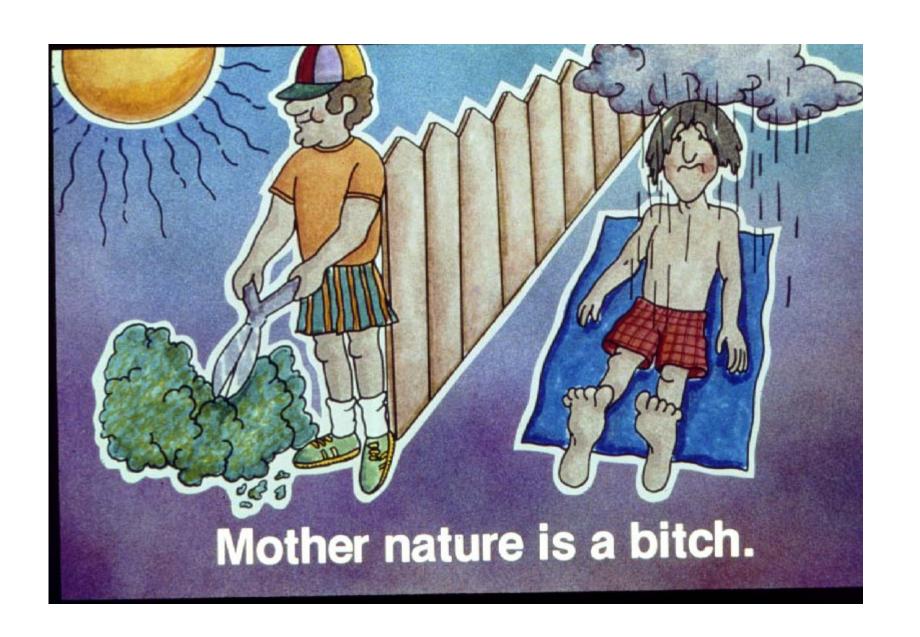
PHYSICAL STRENGTH OF THE ELDERLY

\*Maximum physical strength is about age 30

\*After 30, one loses about 1% of physical ability per year







Don Marquis - "As a man gets older, he suspects nature organized him for the benefit of dentists and doctors."

"Aging is when you have too much room in the house and not enough room in the medicine cabinet."

"Aging is when you sink your teeth into a steak and they stay there."

"Aging is when the gleam in your eyes is from the sun hitting your bifocals."

H. L. Mencken - "You know you're old....when you forget to pull up your zipper and then forget to pull it down."

Josh Billings - "In youth we run into difficulties, whereas in old age difficulties run into us."

"Aging is when you feel like the night after and you haven't been anywhere."

This data clearly indicates that physicians cannot statistically increase quantity of life of the elderly:

Physicians can only change quality of life or functionality.

"ADD LIFE TO YOUR YEARS,

NOT YEARS TO YOUR LIFE."



"There is no fountain of youth.

This is the fountain of aging gracefully."

## 11. What are the key principles in the care of older adults?

#### XII. APPROACH TO THE ELDERLY PATIENT

The physicians who care for the elderly must not only know about age-associated changes in pathophysiology and function, but also be aware of the special problems of the elderly including:

- A. The elderly vary greatly. The practitioner must individualize his approach to the elderly because there is such great variability in organ function, general health and mental status.
- B. The elderly have multiple diseases and functional impairment (many of which are undiagnosed). Treatment of one disease may unmask another previously undiagnosed disease. Physicians (and patients) should always be alert that any treatment can have significant complications. Even over-the-counter drugs may induce major problems (e.g., anticholinergic medications may cause urinary retention).

- C. Many diseases present atypically. An abdominal complaint may turn out to be a urinary tract infection. New onset anxiety and agitation may be a symptom of a low grade fever.
- D. Silent pathology is often present. Atherosclerotic or cardiac conduction disease may not be noted until the patient is stressed. The "old-old" patient with a perforated viscus may be walking around with no pain complaints.

- E. New complaints should never be ignored or attributed to "old age". Medical treatment should never be given or withheld on the basis of age alone. Some 80 years old are healthier and more functional than some 50 years old.
- F. The elderly under-report their problems. Patients (and families) assume that functional impairments are a natural consequence of aging and don't report it. Arthritis, incontinence and depression are often under-reported (and, therefore, under-treated).

- G. Elderly respond to medical problems by reducing their functional status. The physician should react when the elderly report they are eating less, in bed more, walking less, falling more...
- H. Drugs and polypharmacy can have highly unusual effects in the elderly. Elderly may share drugs with a neighbor or not fill an expensive prescription.

- I. The elderly are often poor communicators. The physician must be involved with and support the significant caregivers. The patient and the caregiver may have a different view of the same problem.
- J. The elderly need a physician who is positive toward the patient.

  The practitioner should create a state of confidence, calm and caring.

  This is best done by the primary care physician. The specialist cannot appreciate or follow the total physical, emotional and psychosocial factors needed for good car.

## The key principles of geriatric care (summary)

#### Geriatric Principles

- Elderly Are Heterogenous & Aging Research is Difficult
- Chronologic and Biologic Age are Imperfectly Matched; Medical Care Should NEVER be Rationed on the Basis of Age Alone
- e Diseases Present "Atypically" in Elderly
- e Older Patients Often Have Multiple Diseases and Functional Impairments
- e Silent Pathology is Often Present
- e Drugs are Potential Poisons
- e Geriatrics is a Multidisciplinary Field
- e Primary Care Physician is Gatekeeper

Abrantain JC Com Studies in Cortatries ... Officer, Ct. 1980

AMBLI / ILL BOX



Who is this man?

MYTH - The elderly complain a lot.

TRUTH - The elderly don't complain enough - considering their many chronic problems. Most of the chronic problems of the elderly are actually unrecognized and under-reported by physicians.

# 12. What are the Biological Theories of Aging and Mortality?

# Who was Jeanne Calment? Search for Immortality:



The Bible records legendary life spans such as Methuselah who fathered Lemach at age 187 and continued to father children for nearly 800 years. Sarah gave birth to child at 90 and Abraham died still active at 175. Despite reports of extraordinary long lives the oldest documented human was French woman, Jeanne Calment, who died in 1997 at age 122.

## Prolongation of Youth and Life (Busse, 1989)

- Aurora persuaded Zeus to grant her husband Tithonus immortality. Regrettably, she neglected to ask for him to remain eternally young.
- Hyperborean Theme Greeks held that this group of people who resided beyond the north lived to an extreme old age.
- 3. Antediluvian Theme prior to the flood people lived from 365 969 years.
- 4. Fountain of Youth
  Hebrew River of Immortality
  Hindu Pool of Youth

- Myth of Gilgamesk found on Babylonian tablets. Quest for eternal youth.
- Alchemy base metals into gold, discovery of elixir of life, universal cure for disease, a means of indefinitely prolonging life.
- Gerocomy practiced in Near and Far East.
   An older man absorbs virtue and youth from younger women.

- Pope Innocent VIII (1432-92) transfused blood of young men into his veins; he died almost immediately.
- Brown-Sequard (1889) injected mashed-up dog testicles into old men; Elie Metchnikoff (1845-1916) advocated the removal of the large intestine and the ingestion of large amounts of yogurt.
- 10. Myth of Cell Immortality originally proposed by Carrel and Ebeliz in early 20th century. However, only truly immortal cells have been cervical cancer cells.

- 11. Gerovital H3. Anna Aslan (Bucharest) used 2% procaine hydrochloride with benzoic acid (preservative) and potassium metabisulfite (anti-oxidant). May have anti-depressant effects.
- 12. Centenarians generally exaggerated
  Vilcabamba Equador
  Hunzukuts Kashmir
  Abkhazians Georgia, Russia
  Max. lifespan 116 years

# Maximum Life Spans

• Mouse 3.5 yrs

• Dog 20 yrs.

• Cat 30 yrs.

• Chimpanzee 50 yrs.

• Human 122 yrs.

• Tortoise 250 yrs.

# Who is Addwaitya?

### Slow going! Tortoise dies after 250 years

Addwaitya, believed to be oldest tortoise in the world, lived in Indian zoo



# So how long so you want to live?

Survey by Duncan et al of 30,000 people at future trends in bioscience meetings:

| a. Age 80  | 60% |
|------------|-----|
| b. Age 120 | 30% |
| c. Age 150 | 10% |
| d. Forever | 1%  |

## The Biological Theories of Aging?

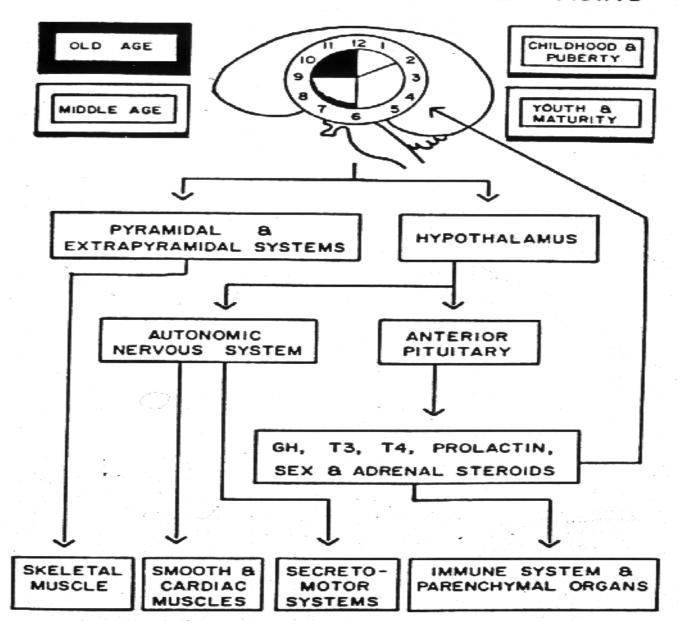
#### A. Program Theories

Nothing works perfectly or lasts forever.

- 1.Biological clock is written into our cellular codes that lead to aging. Cells have a limited capacity to divide and function (<u>Hayflick</u> <u>Theory</u>).
- 2. Hormonal or Brain theory of Aging

Aging is due to programmed changes in hormonal or neural facors. The hypothalamus regulates body functions and it seems to change its output with time. Is there a "death hormone" that stimulates aging like in some other species (e.g., Pacific salmon)? It doesn't seem to exist in most species.

#### NEUROENDOCRINE THEORY OF AGING



#### 3. Mutations

Mutations in DNA, which accumulate with aging and /or are not corrected as readily with age, are passed on to increasingly more cells to the point where function is reduced.

#### 4. Genetic Switching

Rather than mutations but a genetic switching off occurs in certain genes, i.e., the information needed to produce DNA is not available and the cell dies.

#### 5. Telomeres

Telomeres are repeated as tips on the end of chromosomes and have a special DNA sequence that maintains the integrity of the chromosomes. The telomeres shorten every time a cell divides. After a certain amount of shortening, cell division no longer occurs and the cell ages and dies. Telomerase is an enzyme in most cells that repairs the telomeres, lengthening the lifespan of the dividing cells. In cancer cells, telemerase is activated beyond its normal level of activity and cells divide uncontrollably. Experiments have suggested that telemerase may be able to reverse the aging process, i.e., introduction of telemerase into normal cells allows them to continue to divide for at least 20 more generations.

B. Damage or "Wear and Tear Theories"

Based on the premise that cells or organs are unable to repair themselves as they age.

#### 1. Immune Theory

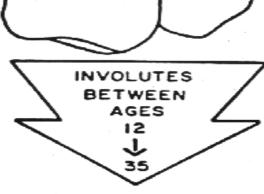
Ability of body to resist disease decreases with age. Body is less capable of discriminating between self and foreign elements—can lead to autoimmune diseases.

#### 2. Free Radical theory

Free radical are highly reactive chemicals that can trigger processes that will alter body functioning.

#### IMMUNOLOGIC THEORY OF AGING

THYMOSIN PRODUCTION
T-CELL LYMPHOCYTES



#### OLD THYMUS

- ↓ THYMOSIN PRODUCTION
- **↓** T-CELL FUNCTION



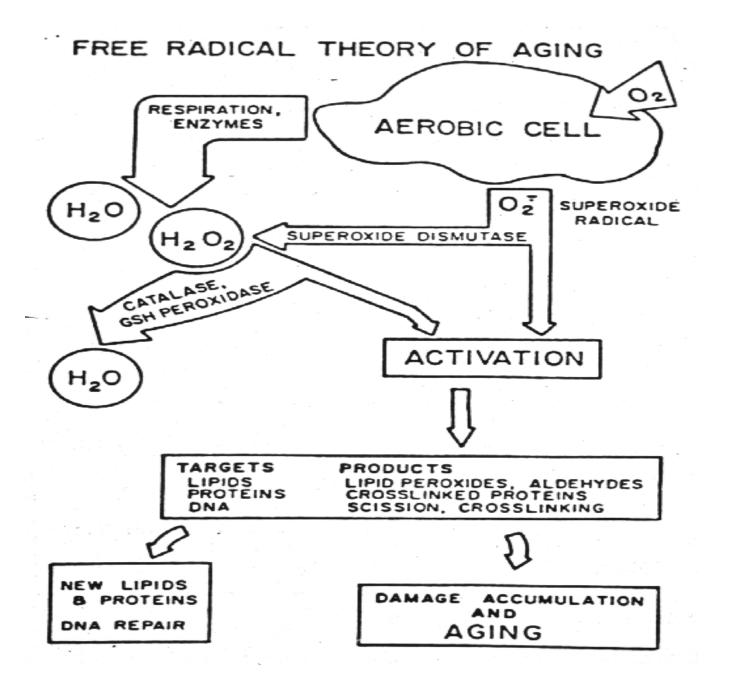


VIRUSES MONO- AND MULTI-CELLULAR ORGANISMS ↓B-CELL FUNCTION CAUSING:

↓ ANTIBODIES

FAILURE OF "SELFRECOGNITION"

↑ AUTOANTIBODIES



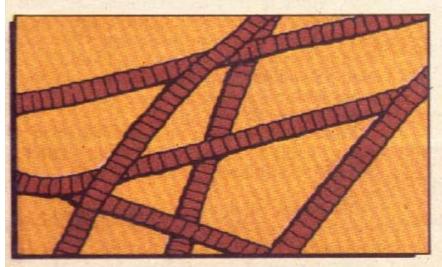
#### 3. Eversion

Cross-linking changes occur in collagen structure with aging —ester bond transformations occur so that bonds increase from within tissues to between tissues (seen in connective tissue).

4. Glycosolation –nonenzymatic reaction between glucose and protein. This process adds glucose haphazardly to sites on peptide chain. This creates irreversible cross-links between protein molecules; when added to nucleic acid it may damage DNA.

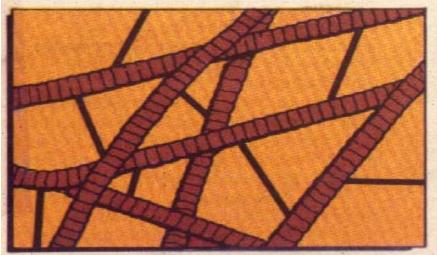
#### THE WEAR AND TEAR THEORY

any components of the body—such as nerves and collagen, the large proteins that hold the skin together—are made to last a lifetime. As these components become damaged, their function is lost because they are not replaced.



#### NORMAL COLLAGEN

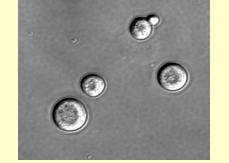
The large fibers of normal collagen slide past each other as skin stretches and flexes with movement.



#### DAMAGED COLLAGEN

With age, rigid chemical bridges form between fibers of collagen, reducing the ability of the skin to stretch and flex.

## Starving Yeast and the Genetics of Aging



- 1. NPT1 gene controls the activity level of a second gene called SIR2. SIR2 is short for Silent mating type Information Regulation-2.
- 2. Artificially stepping up NPT1 activity stimulated SIR2, and caused yeast cells on normal nutrients to live an average of 30 to 40 percent longer, just as if they'd been on restricted calories, i.e., starving of yeast cells leads to a similarly extended lifespan
- 3. SIR2 (in mammals is known as SIRT1, SIR2L1 or Sir2a) is the namesake of a family of closely related enymes, the "sirtuins." Members of this family have been found in nearly all organisms.
- 4. Sirtuins are hypothesized to play a key role in an organism's response to stresses (e.g. heat or starvation) and to be responsible for the lifespan-extending effects of calorie restriction.

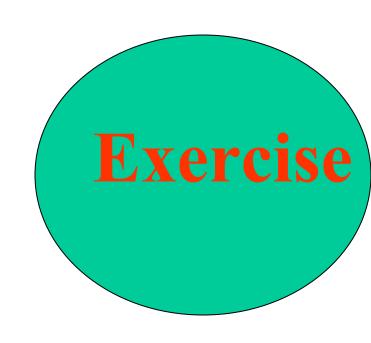
#### Senescent Cells

- If destroyed seem to slow aging in mice
- They didn't live longer but were healthier

## Genetics, Lifestyle, Environment & Longevity

- It is estimated that about 35% of factors that influence the lifespan are inherited.
- The remainder are due to chance events that occur during biological development and environmental factors.
- However, familial (genetic?) factors play a greater role for exceptional longevity (age 100+).





- •May add 6 or 7 years to lifespan
- •Exercise may stimulate the production of telemerase
- •Resistance exercise may activate muscle stem cells

## Which group in the USA has the longest longevity?

- 7th Day Adventists: 88 yrs men; 89 yrs women
- Lifestyle of exercise, don't smoke, often vegetarians, strong social supports
- Suggests many us could live to 90 if our lifestyles were better

#### **Social Class and Longevity**

Table 6: Total expectation of life by social class (ONS Longitudinal Study) for men and women, England and Wales (1992–96)

| Social class   | Men      | Women    |  |
|----------------|----------|----------|--|
| 1              | 77.7     | 83.4     |  |
| II .           | 75.8     | 81.1     |  |
| IIIN           | 75.0     | 80.4     |  |
| IIIM           | 73.5     | 78.8     |  |
| IV             | 72.6     | 77.7     |  |
| v              | 68.2     | 77.0     |  |
| Difference I-V | 9.5      | 6.4      |  |
| All            | 73.9 yrs | 79.2 yrs |  |

Source: Hattersley (1999)

#### Test Yourself (Part 2)

8. Elderly persons are the most heterogeneous of any age group. 9. Older persons don't complain enough 10. Telomeres lengthen after each cell division. F 11. The free radical theory is a theory about F glycosolation developed by Che Guevera when he was a medical student in Argentina... 12. The Hayflick Theory states that cells have a

limited number of divisions

#### 14. What are the psychological theories of aging?

Psychological and Developmental Theories of Aging

Butler: "Life Review"

Erikson: 7th Stage of Ego

Neugarten: "Age Course"

Development: "generativity vs

Guttman: Shifting roles:

stagnation;" 8th stage: "ego

male: nurturing

integrity vs despair"

female: instrumental

Goldfarb: Loss

Pollack: "Mourning-Liberation"

Levinson: 8-10 year stability followed by transitions.

#### Transitions:

- (1) 17-22 years adolescence to adulthood;
- (2) Age 30-33 into "settling down";
- (3) Midlife transition into middle adulthood;
- (4) Transition at age 50 toward end of middle adulthood;
- (5) Late life transitions entering late adulthood.

Note: People seek help during transitions.

#### **Characteristic Losses of Old Age**

Physical vigor and stamina Loss of mobility (with risk of fall) Mental energies—alertness, memory Sensory input—vision, hearing, taste, smell. Loss of hearing and vision increase social isolation Sources of affection—spouse, family, friends, peers Status, especially after retirement Income Location perhaps preceded by the "empty nest syndrome" Nutrition, in extreme poverty, especially in inner cities In dreams—theme of loss expressed symbolically (eg. wandering in strange place, being lost, left behind, losing something familiar)

#### Adult Developmental Lines (Colarusso & Nemiroff, 1981)

- (1) Intimacy, love, sex
- (2) The body
- (3) Time and death
- (4) Relationship to children
- (5) Relationship to parents
- (6) Mentor relationship
- (7) Relationship to society
- (8) Work
- (9) Play
- (10) Finances

1.Adaptation in youth doesn't always predict adaptation in old age, ie in short-term there is a correlation but over long periods not much correlation.

Ex: bad things (eg depression, physical illness, alcohol) happen unpredictably

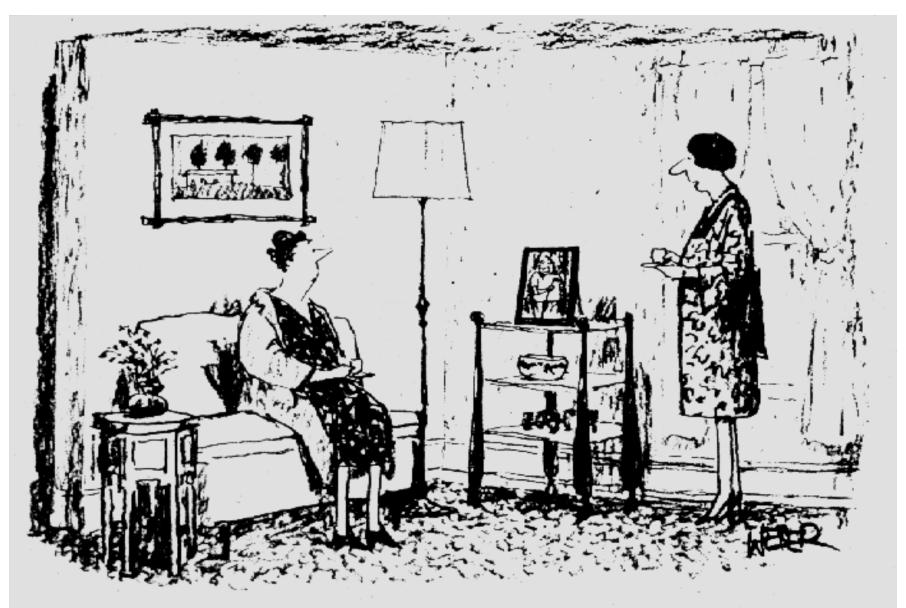
- .persons with character disorders learn to be acceptable .deficits can be compensated and mastered
- 2. Development continues into old age ie character is mutable;
- 3.Tasks of life cycle different in last 50 years from first 20-25 years.



"Over the long haul, it's been a long haul."



"Pve been against it from the start, but who am I? Only her mother."



"He got it into his head that he could lower his cholesterol more easily with another woman."



"Son, your mother and I think that you are now old enough to get your own drink of water."

#### Late Adulthood (age 60+)

- maintenance of body integrity
- reaction to physical infirmity
- attitude toward personal death
- ability to form new ties
- reversal of roles (e.g., be cared for by children)

#### PSYCHOSOCIAL CHALLENGES OF AGING

DESERTION
DISABILITY
DEPENDENCY
DEATH

"All my friends have gone to Miami or to heaven."

"I do not want to achieve immortality through my work, I want to achieve it by not dying."

Woody Allen



"Day 3,762: Still dead."

Adult (Schaie, 1982)

Temporal Monitoring (young adulthood): emphasis on acquisition of facts to their application in workplace, social relations

Executive Monitoring (midlife): need to master system such as family, business, organization

<u>Intellectual Integrity</u> (late life): concern with purpose of knowledge (e.g., interests, values, priorities vis-a-vis purpose of one's life).

#### Wisdom(Vaillant)

"Keeper of Meaning"
Increasing wider spheres of concern;
youth: self
middle adult hood: Children/family/village
late adulthood: global community.

#### Characteristics of Older Persons (Butler)

- 1. Change in Sense of Time -- less future oriented
- 2. Sense of the Life Cycle
- Tendency toward Life Review
- 4. Reparation & Resolution
- 5. Attachment to the Familiar

- 6. Conservation of Continuity
- 7. Desire to Leave a Legacy
- 8. Transmission of Power
- 9. Sense of Consummation or Fulfillment in Life
- 10. Capacity for Growth

#### 15. What are the social theories of aging?

#### Social Theories of Aging

- Disengagement Theory (Cummings & Henry, 1961): aging invariably causes physical, psychological, and social disengagement, that a shift from "outer" to "inner" world is healthier.
- Activity Theory (Havighurst, 1963): remaining active is good for the aging individual and society.
- 3. Continuity Theory (Neugarten, 1964; Atchley, 1989): older people tend to behave in patterns established earlier in life. That is, there is an underlying essential self or identify throughout life.

What is best seems to depend on physical status, i.e., those in better health (activity); more frail (disengage)

- 4. Age Stratification (Palmore, 1981): society is composed of different age groups with different roles and expectations (part of a life span perspective); each age group must move through time while responding to environmental changes (e.g., age vs. cohort).
  - Minority Group Theory (Busse, 1970): the elderly are a minority group frequently discriminated against by society.
  - 6. <u>Life Events and Stress Theory</u>: major events usually associated with advanced age are particularly important to health and well-being. (Must distinguish between welcomed and resisted events e.g., retirements).

#### SUCCESSFUL AGING

#### **POSITIVE AGING:**

- Absence of serious physical illness
- Absence of serious functional deficits
- Absence of serious cognitive deficits
- Optimal of social functioning

# "With the ancient is wisdom; and in length of days understanding." Bible, Job

"Old age is a high price to pay for maturity"

-Tom Stoppard

#### Test Yourself (Part 3)

- 13. Scores on memory tests decline with age
- 14. Adaptation in youth is a strong predictor of adaptation in old age
- 15. The 4 Ds of the psychosocial challenges of aging are desertion, disability, dependency, and doctors
- 16. Failure to attain "ego integrity" may result in despair

T/F

**Depends** 

17. Older people who shift from the inner to the outer world(disengage) are psychologically more healthy.

### NOTES FOR WATCHING HAROLD & MAUDE

In watching the following segment from the 1971 classic film, "Harold and Maude," try to keep track of the various psychosocial aspects of aging exhibited by Maude such as change in sense of time, sense of the life cycle, tendency toward life review, attachment to the familiar, conservatism of continuity(passing on what is worthy, passing on wisdom), desire to leave a legacy, sense of consummation and fulfillment in life, capacity for growth, confronting losses, and "mourning-liberation." Also, note how she preserves her sexuality and femininity.

Ruth Gordon, who played Maude, was 75 at the time of the filming, and she worked continuously until her death at age 89.

