

CURAC 2017

Successful Aging: A Shared Responsibility

- What can you (Senior or “Junior”) do?
- What can our Health & Social Professionals do?
- What can our Health System do?

Dr. William B Dalziel

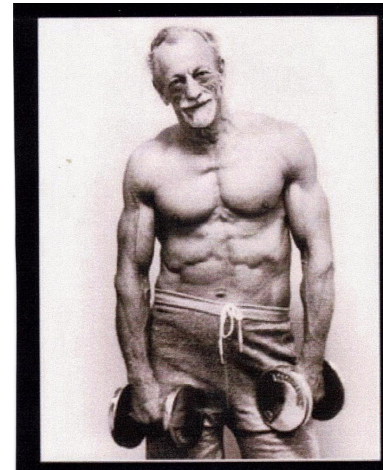
Professor, Division of Geriatric Medicine, University of Ottawa



James and Loretta

What is Successful Aging?

1. Chronic disease free?
 2. Disability free?
 3. Dependency free?
 4. Good cognition
 5. Quantity of life
 6. Quality of life (adding life to years)
 7. Dealing optimally with your dealt hand in the great poker game of life
- High function } Rowe & Khan Definition



The Different Paths to 100

(Thomas Perls AM J Clin Nutr 2006)

- Centenarians 1 in 10,000 → 1 in 5,000
- Centenarians = genetics, environment, lifestyle, luck
- Longevity enabling genes: if someone reaches 100, their male (17x) and female (8x) siblings are more likely to reach 100
- 3 Groups
 1. 13% escapers (no diseases of aging at 100)
 2. 45% delayers (diseases of aging only after 80)
 3. 42% survivors (at least 1 disease of aging by 80)



COUNT THE NUMBER OF “F’S” ON THIS SLIDE

FINISHED FILES ARE THE RESULT
OF YEARS OF EXPERIENCE
COMBINED WITH MONTHS OF
SCIENTIFIC RESEARCH

1. 4
2. 5
3. 6
4. 7
5. 8

What is the remaining life expectancy
for an 80 year old woman?

Another:

1. 2 years
2. 4 years
3. 6 years
4. 8 years
5. 12 years



What % of seniors aged 80 have no
important functional impairments?
(They are independent).

1. 10%
2. 30%
3. 50%
4. 70%
5. 90%



The Top 10% most complex needs patients
(mostly seniors) “consume” what % of total
health care costs?

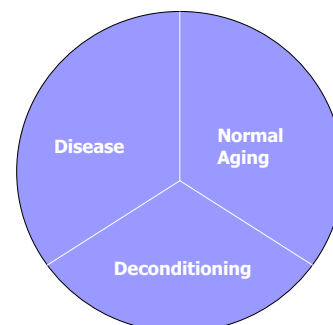
1. 20%
2. 25%
3. 30%
4. 45%
5. 60%

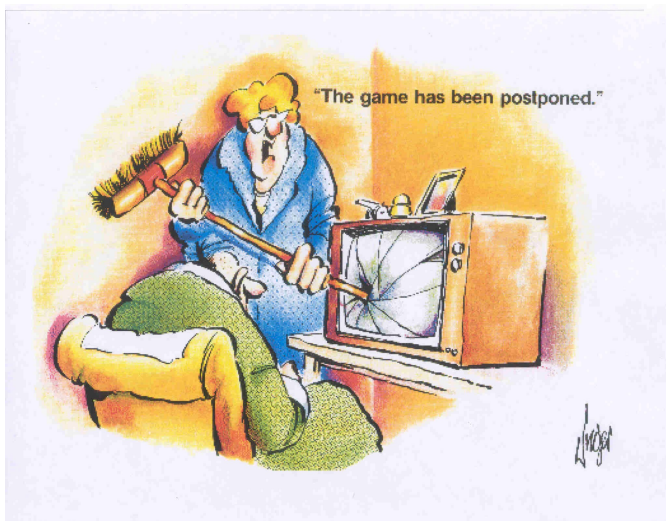
Seniors are Heterogeneous (↑ Differences)

Hospital Visits by Seniors Over 10 Years (Wolinsky)

- 43% NEVER
 - 25% ONCE
 - 4.8% consistently high
 - 6.4% Inconsistently high
- 68% RARE
- 145030748

The Elderly and Physiologic Decline





WHAT SENIORS AND “JUNIORS” CAN DO

Old Age Ain't For Sissies

Only recent bad habits hurt you.

Only recent good habits help you.

Health Promotion: 1^o Prevention

1. Tobacco Cessation
2. Nutritional Advice
3. Calcium: 1200-1500 mg elemental Calcium
4. Exercise
 - ☐ Aerobic
 - ☐ Strength



Exercise



1. RCT of exercise Training for Older People

(Senior Silver Centre Trial)

(I. Tsuji. Journal of Epidemiology. 2000 10:pg 55-64)

- ☐ **Intervention:** Warm up, bicycle, resistance exercised (rubber films), cool down (2 – 3 x 2 hour classes/week x 25 weeks).
- ☐ **Results:** Net gain VO_2 Max \uparrow 2.1 ml/kgm/min (10.3%) equivalent to participants becoming younger in aerobic capacity by 5 YEARS

The Benefits of Quadriceps Strength Training in Nonagenarian Women in a Nursing Home

10 leg lifts, 6 times per day increased quad strength in 8 weeks by what %??

- A) 12%
- B) 31%
- C) 55%
- D) 100%
- E) 174%



Exercise



2. High Intensity Strength Training in Nonagenarians in a Nursing Home

(Fiatarone M. JAMA. 1990. 38:1256-1300)

- ☐ **Intervention**
 - 3 sessions quad strengthening exercises/week x 8 weeks
- ☐ **Results**
 - Quad strength \uparrow 174%
 - Tandem gait speed \uparrow 48%

Exercise and the Aging Brain

1. Walking 1 hour a week vs talking decreased dementia at 3 years by 30%.
2. Walking 1 hour a week increased hippocampal volume 1% in a year vs control group decrease 2%
3. 30 trial meta-analysis of effects of exercise training in elderly persons with CI and dementia
 - Statistically significant benefits A,B,C (MMSE 16)



Health Promotion : 1^o Prevention

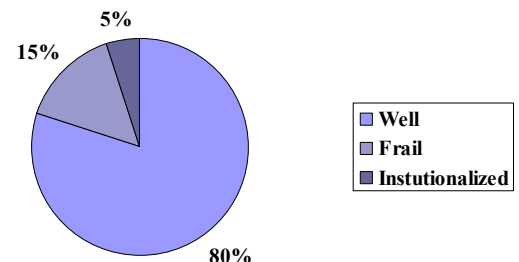
5. Safe Driving – Counselling / “Screening”
6. Vaccinations
 - Influenza (annual)
 - Herpes Zoster (Shingles)
 - Pneumococcal – (1) Pneumovax **AND** (2) Prevnar
 - Tetanus – single booster at age 65
7. Advice re: sun exposure.
8. Vitamin D 1000 IU- 2000 IU



Definition of Frailty

- Increased **VULNERABILITY** to insult or challenges resulting from impairments in multiple domains that **COMPROMISE** compensatory ability. JAMA 1995

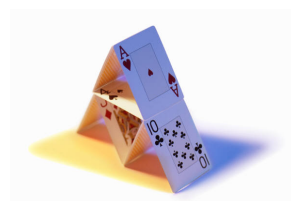
The Elderly in Canada



- The frail elderly are 15% of seniors and 3% of the overall population.
- **THIS 3% USES 30% OF HEALTHCARE \$**

Frail (Dictionary Definition)

- Physically weak or delicate
- Easily damaged or broken



? SHOULD THEY BE TARGETED?

WHAT HEALTHCARE & SOCIAL CARE PROFESSIONALS CAN DO

Recognition of Frailty is an

Opportunity to

"UNFRAIL"

Components of an appropriate assessment of illness in "Frail Elderly"

- | | |
|--------------------------------|---------------|
| ■ Chief Complaint | Usual |
| ■ Past Medical History | Assessment |
| <hr/> | |
| ■ Medications | |
| ■ Communication | |
| ■ Cognition/Mood | Comprehensive |
| ■ Function | Geriatric |
| ■ Environment | Assessment |
| ■ Socio-economic Status | |
| ■ Formal and informal supports | |

How Do You Unfrail?

1. Primary Prevention
2. Better Primary Care System with:
 - FOCUS on FRAILITY
3. Focus on common Geriatric complaints including screening/case finding.

Professional Unfrailing: The Top 10

1. Health Promotion/Case Finding
2. Exercise is everyone's business.
3. Review medication (15%)
4. Early detection of acute illness (Geriatric Giants and atypical presentation)
5. Identify high risk patients at admission and approach differently.

Professional Unfrailing: The Top 10

6. Appropriate Treatment (acute and chronic) optimize co-morbidities
7. In Hospital Mobilize
8. Identify Rehabilitation potential
9. Optimize environment – minimize personal disabilities
10. Maximize Caregiver support (family and formal) and REAL HOMECARE

Screening

Case find (Screen) for common conditions in high risk individuals

- ☐ Dementia
- ☐ Depression
- ☐ Pain
- ☐ Falls
- ☐ Osteoporosis
- ☐ Hypertension
- ☐ Incontinence

Dementia is the Disease of the 21st Century.

Dementia Risk Calculator

< 65	1%
65	2%
70	4%
75	8%
80	16%
85	32%

✓ Risk Doubles every 5 years of Age
✓ Each additional vascular risk factor approximately doubles the risk
✓ Positive family history doubles the risk

Screen 80 + or 65-80 with VRFs

Dementia Quick Screen

- 3 item recall (**0-1 correct:** OR 3.1)
- Animals in 1 minute (**<15:** OR 20.2)
- Clock drawing (**abnormal:** OR 24)

How to Avoid Getting Dementia

1. Recognize and treat ALL VRFs (vascular risk factors)
2. Go play outside: Exercise: walking and pumping
3. Stay in school...and keep learning
4. Wear a helmet
5. Eat like your Italian Momma

How to Avoid Getting Dementia

6. Go find a nice girl or boy (and get married)
7. I love to cook with wine and SOMETIMES I even put it in the food.
8. Don't smoke or roll in the grass.
9. Go play with your friends.
10. Don't Worry...Be Happy

Texting for Seniors



1. DWI – Driving While Incontinent
2. LMDO – Laughing My Dentures Out
3. LOL – Living on Lipitor
4. TOT – Texting on Toilet
5. GGLKI – Gotta Go, Laxative Kicking in!

What Else Can The System Do?

1. Hospital Focus on their MAJOR CLIENTS not just Senior Friendly but Senior Effective
2. Better Coordination ("Seamless" is a false God)
3. Better Community Services: Focus on Frailty and Real Case Management + \$\$\$\$
4. Informatics Integrated
5. Everyone makes Geriatrics their business.
(Teach Medical Students and Residents: Curriculosclerosis).



My memory really sucks Mildred, so I changed my password to "incorrect. That way when I log in with the wrong password, the computer will tell me..."Your password is incorrect".