Dementia in 2015: Prevention, Assessment, Management & Future Direction”

Dr. Bill Dalziel
Medical Director,
Geriatric Medicine Ambulatory Care & Day Hospital
The Ottawa Hospital
Professor- Geriatric Medicine
The University of Ottawa
Whatever happened to our sexual relations?

I don't know. I don't even think we got a Christmas card from them this year.
What % of those at age 85 have Dementia?

1. 8%
2. 10%
3. 16%
4. 32%
5. 50%
Alzheimer’s Disease is the Disease of the 21st Century

2030

- USA – 15 million people with dementia
- Canada – 1.5 million people with dementia
Dementia: The Silent Epidemic

- A new case worldwide every 7 seconds
- A new case in Canada every 4 minutes (100,000 new cases per year), the prevalence will increase from now (450,000) to 750,000 by 2025
- 3rd most expensive disease in the Canadian Healthcare System
- 1 in 4 Canadians has a family member with dementia
- 1 in 2 Canadians knows someone with dementia
- Ontario has 100,000 drivers with dementia
What is Dementia?

Dementia is a set of symptoms, which includes loss of memory, understanding, and judgment.
How is Dementia different from Normal Ageing?

Many complain of decreased ability to remember things BUT

• Typically the information comes to the individual later
• These changes do not interfere with function/occupation
• These changes are not progressive
Dementia is . . .

**Progressive:** Changes from the disease increase over time

**Degenerative:** brain cells degenerate or break down

**Irreversible:** damage cannot be repaired
Spectrum of Cognitive Change

- Normal Changes of Ageing
- Mild Cognitive Impairment
- Dementia

Lee, 2013
Spectrum of Cognitive Change

- Normal Changes of Ageing
  - Mild forgetfulness
  - Not progressive
  - No functional change

- MCI
  - Cognitive change with no functional change

- Dementia
  - Cognitive change causing functional loss
Dementia – not a disease, but a set of symptoms that accompanies a disease

- Alzheimer’s Disease
- Mixed Dementia
- Lewy Body Dementia
- Frontotemporal Dementia
- Vascular Dementia
Reversible Components of Memory Loss

- Depression
- Medications
- Nutritional disorders
- Metabolic disorders
- Other

First Link – Next Steps for Families
Early Stage

- Short-term memory loss
- Difficulty concentrating
- Trouble following directions
- Unable to find right words
- Trouble with doing more complicated activities of daily living
Early Stage

- Less sparkle, spontaneity, ambition
- Appears indifferent, decreased interest
- Withdrawal from usual activities
Early Stage

What is happening to me?

- Getting lost
- Appears vague, uncertain, hesitant to initiate activities
- Forgetfulness disruptive to formal routines
Middle Stage

- Continued Memory problems
- Personality & Behaviour changes
- Assistance needed for personal daily tasks
- More executive and visuospatial problems
- Capacity issues
Dementia Quick Screen: 2 Minutes

- 3 item recall (0-1 correct: OR 3.1)
- Animals in 1 minute (<15: OR 20.2)
- Clock drawing (abnormal: OR 24)
Alzheimer Risk & Protective Factors

**Genetic risk factors**
- Family history (1° relative with AD 3.5 x risk)
- Female Gender
- Down’s Syndrome

**Low Education**
- Pre-existing lower mental ability

**Risk Factors**
- Head Trauma
- Depression in men: 4x risk
- Smoking: 2x risk
- ↓ TSH: 4 x risk
- Exposure to toxins (pesticides, fertilizers…): 4 x risk
- Vascular:
  - Lacunar/deep white matter infarcts: 20 x risk
  - Apolipoprotein E e4 especially E4/E4
  - Hypertension & Hypotension
  - Diabetes Mellitus
  - Elevated homocysteine levels
  - Decreased folate levels
  - Increased lipids and/or cholesterol

**Protective Factors**
- Apolipoprotein E e2 or e3
- High Education
- Diet: Fish, vegetables
- Moderate Alcohol
- All lipid lowering drugs
- Statins
- NSAIDs?
- Physical activity
- Mental activities
- Rich Social Networks

Treatment Options

1. Prevention

2. Manage your health concerns:
   ✓ Treat risk factors
   ✓ Review drug side effects

3. Anti-Dementia drugs (a trial for all)

4. Education & family support

5. Future Planning
Prevention

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.
Prevention

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
Now! ...That should clear up a few things around here!