The Dementia Challenge

Yves Joanette, PhD FCAHS
Scientific Director, CIHR Institute of Aging
Lead, CIHR Dementia Research Strategy

Canadian Academy of Health Science
2015 Forum and Annual General Meeting
September 15
Aging – Canada and the World

Life Expectancy 1960-2010

Source: Adapted from primary sources: WHO, World Bank, UNESCO, CIA and individual country databases for global health and causes of death. CDC, NIH and individual state and county databases for verification and supplementation for USA data.
Canada - Life Expectancy at Birth

Both Sexes: 82
Women: 84
Men: 80

% Population 65 and plus
2036 – 25%
2009 – 14%

Statistic Canada, 2012

Source: WHO – Global Health Observatory Data Repository
http://apps.who.int/gho/data/node.main.688, September 2015
Canada – Healthy Life Expectancy at Birth

Both Sexes: 72
Women: 73
Men: 71

Source: WHO – Global Health Observatory Data Repository
http://apps.who.int/gho/data/node.main.688, September 2015
Estimated Prevalence of Dementia

Source: WHO – Global Health Observatory Data Repository
http://apps.who.int/gho/data/node.main.688, September 2015

(Prince, 2013 & CAHS, 1994)
Neurodegenerative Diseases Causing Dementia: A Life Course Challenge

Sperling et al., Alzheimer’s & Dementia, 2011
Adapted from Jack et al., Lancet Neurol., 2010
% of Population Over 60 - 2012
% of Population Over 60 - 2050
Figure 3. The speed of population ageing. Time required or expected for population aged 65 or older to increase from 7% to 14%.
% of Growth of Population 2005-2040

- All Ages: +35%
- 65-84: +164%
- 85-99: +301%
- 100 and +: +746%

Source: US Census Bureau
Inspired by Daigo Fujirawa/Globe Staff
Increase in numbers of people with dementia worldwide (2010-2050), comparing original and updated estimates.

- 2010: 36 million
- 2013: 44 million
- 2030: 76 million
- 2050: 135 million

Canada

CIHR IRSC

Alzheimer's Disease International

Policy Brief for Heads of Government
The Global Impact of Dementia 2013–2050
Numbers of people with dementia by world region (2015-2050)

- Canada: 4.73
- Latin America & Caribbean: 8.68
- Europe Western: 16.0
- Asia (high income): 11.74
- Africa and the Middle East: 12.35
- Asia (low and middle income): 63.16
- World: 135.46

Source: Martin Prince, The Global Observatory for Ageing and Dementia Care, King's College London
Dementia – A Public Health Issue

Alzheimer’s disease is the most common form of dementia. Every 4 seconds somebody in the world is diagnosed with dementia.

Economic Cost of Dementia

Source: Alzheimer Society of Canada
Rising Tide:
The Impact of Dementia on Canadian Society

A study commissioned by the Alzheimer Society

Dementia
A Public Health Priority

Now:
- 500,000 Canadians with Alzheimer’s disease
- $15 billion cost to Canada
- 231 million hours of unpaid care

Within a Generation:
- 1,100,000 Canadians with Alzheimer’s disease
- $153 billion cost to Canada
- 756 million hours of unpaid care

World Health Organization
UK Call for Action

In December 2013, British PM David Cameron brought the dementia challenge to the international stage.

“If we are to beat dementia, we must also work globally, with nations, business and scientists from all over the world working together as we did with cancer, and with HIV and AIDS. This is going to be a bigger and bigger issue; the key is to keep pushing.”

David Cameron, December 11, 2013 (BBC News)
Second Global Dementia Legacy Event
Co-hosted by Canada-France

Harnessing the Power of Discoveries: Maximizing academia-industry synergies

September 11-12, 2014
111 Sussex Drive, Ottawa, Canada

Program
http://www.cihr-irsc.gc.ca/e/47902.html
Global action against dementia
Action mondiale contre la maladie d'Alzheimer

World

An Independent Report on the Global Regulatory Approach to Achieve the Development of Safe, Effective and Affordable Drugs for Dementia

Executive Summary and Recommendations

Raj Long
Global action against dementia
Action mondiale contre la démence

FIRST WHO MINISTERIAL CONFERENCE ON GLOBAL ACTION AGAINST DEMENTIA
16-17 March 2015, Geneva

Call for Action
Adopted by 80 Countries
CIHR
Dementia Research Strategy
Supporting International Collaborative Research Centres of Excellence in Neurodegeneration
Supporting International Collaborative Research
JPI– Neurodegenerative Diseases

JPND is the largest global research initiative aimed at tackling the challenge of neurodegenerative diseases.

WHAT COUNTRIES PARTICIPATE IN JPND?

LEARN MORE
THE RISING TIDE OF DEMENTIA IN CANADA
FACING THE CRITICAL CHALLENGE BY 2025