

Overview of Arthritis & the Older Adult

Education Health Care Professionals

Part 1: Common Types of Arthritis



Copyright © CSAH 2017

1

Defining Arthritis

- Arthritis means inflammation of a joint.
- The most common forms of arthritis in older adults are Osteoarthritis and Rheumatoid Arthritis.
- Osteoarthritis (OA) is a form of degenerative joint disease in which there is inflammation and then gradual loss of cartilage in the joint.
- Rheumatoid Arthritis (RA) is a chronic autoimmune disease that causes inflammation and deformation of the joints which can strike at any age and is three times more prevalent in women than men. It is the most common type of inflammatory arthritis.

(AAC, 2014)

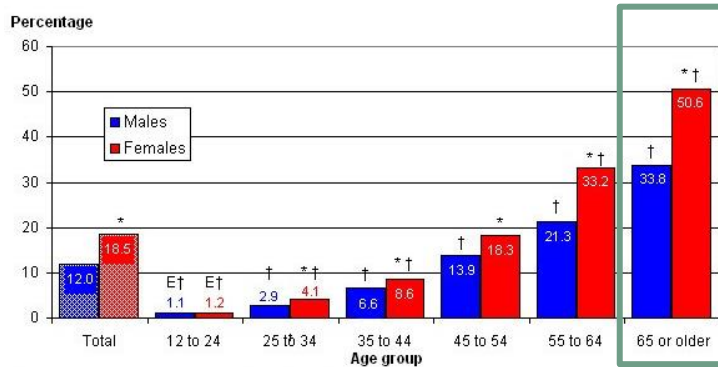


Copyright © CSAH 2017

2

Canadian Statistics

Percentage reporting a diagnosis of arthritis, by age group, sex, household population aged 12 or older, Canada, 2008



The incidence of arthritis increases with age and females regardless of age are more likely to develop this chronic condition.

(Statistics Canada, 2016)



Prevalence in Canada

“Arthritis is one of the most prevalent chronic conditions in Canada and one of the leading causes of disability and health care utilization” (RiskAnalytica, 2010)

2007 Projections of individuals aged 15+ years with arthritis

Year	# of Men with Arthritis	Prevalence of Men	# of Women with Arthritis	Prevalence of Women
2016	2,033,000	13.9%	3,218,000	21.2%
2021	2,232,000	14.6%	3,523,000	22.3%
2026	2,427,000	15.4%	3,827,000	23.3%
2031	2,607,000	16.0%	4,116,000	24.2%

Adapted from (PHAC, 2011)

(PHAC, 2011; RiskAnalytica, 2010)

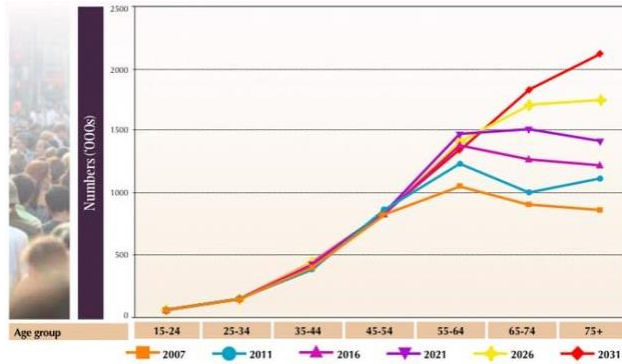


Prevalence & Impact in Canada

Projected numbers of OA diagnosis by 2040 is estimated to be 469,460

Projected numbers of RA diagnosis by 2040 is estimated to be 23,730

Number of people projected to have arthritis by year and age group, 2007-2031 based on Canadian Community Health Survey, 2007



(PHAC, 2011; RiskAnalytica, 2010)

Copyright © CSAH 2017

Impact in Canada

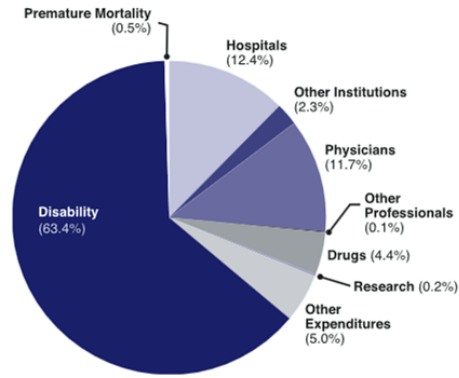


- Canadians with arthritis are about one and a half times more likely to need multiple primary care visits, see a specialist, be hospitalized or see a physiotherapist than someone with a different chronic condition. They are also 2-3 times more likely than someone free of chronic illness.
- A Canadian with arthritis is more likely to report reduced activity levels at home, poor mental health, mood and anxiety disorders.

(Arthritis Society, 2015; PHAC, 2011; RiskAnalytica, 2010)

Copyright © CSAH 2017

Economic Burden of Arthritis in Canada



©Institute for Clinical Evaluative Sciences

Badley noted that all costs related to arthritis in Canada are likely underestimated due to:

- cases when arthritis is a secondary diagnosis
- privately funded rehabilitation
- mobility aids
- over-the-counter medications and supplements
- informal caregiving

(Badley, n.d.)

Copyright © CSAH 2017

Economic Burden of Arthritis in Canada

- According to the Arthritis Society, osteoarthritic joint damage accounts for over 80% of hip replacement and more than 90% of knee replacements in Canada.
- Findings have shown that while there are high costs associated with total joint replacement surgeries, they actually result in a significant savings (\$17.2 billion) in the following year for direct and indirect health care costs to Canadian society.
- In 2010 it was estimated that OA and RA would result in a total economic burden in Canada over a 30 year period of more than \$1.4 trillion and \$257 million respectively.
- Projections made for the period of 2010-2040 estimate that the adoption of early treatment and access to **DMARDs** and biologics will result in a savings of over \$38 billion for Canadians.

(Arthritis Alliance Canada, 2014; Risk Analytica, 2010; Arthritis Society, 2015)

Copyright © CSAH 2017

Arthritis and the Older Adult

- Arthritis impacts mobility and ability to perform **IADL's** and **ADL's**.
- Older adults with arthritis are at greater risk for polypharmacy, osteoporosis, falls and fractures.
- Women over the age of 65 are twice as likely than males to report a diagnosis of arthritis.
- Over 80% of Canadians with arthritis report having additional chronic conditions compared to 37% of people with another chronic condition.
- “Mortality in the population with RA is estimated to be on average 32% higher than in the same population assuming they did not have RA.” ([RiskAnalytica, 2010](#))

([Statistics Canada, 2016](#)); ([Abdulkarim, et al., 2016](#)); ([Arthritis Society, 2015](#))

Symptoms of Osteoarthritis



Normal Knee

Osteoporotic Knee



- persistent pain
- joint stiffness, particularly the hips, knees and lower-back after inactivity or over-use
- joint swelling
- cracking or grating sounds from joints
- pain and tenderness at the base of the big toe
- bony spurs on the edge of joints can result in fingers swelling and becoming red and tender; there may be pain at the base of the thumb

([MacDonald et al., 2015](#))

OA: Effects on the body

- OA in the hands can greatly impair an older adults ability to use writing and eating utensils as well as open containers and other everyday tasks.
- OA in the lower body can result in difficulty walking, climbing and lifting objects.
- Pain associated with physical activity can result in sedentary lifestyles which then result in other negative health outcomes such as diabetes, heart disease and falls.
- While it is not clear how long older adults suffer with joint pain and other symptoms prior to seeking professional help, the time between symptom onset and diagnosis is a period when lifestyle changes can make a big impact to improve function, reduce pain and can slow disability.

(Arthritis Foundation, no date; MacDonald et al., 2015)



Copyright © CSAH 2017

11

Symptoms of Rheumatoid Arthritis

Normal Joint



- persistent joint pain, tenderness, swelling and stiffness for 6 weeks or more

Rheumatoid Arthritic Joint



- morning stiffness that lasts for a half hour or more
- more than one joint is affected and the same joints on both sides of the body are affected
- small joints are affected (wrists, joints of hands and feet)
- fatigue
- loss of appetite
- low grade fever

:(Arthritis Foundation, n.d.)



Copyright © CSAH 2017

12

RA: Effects on the body

The high levels of inflammation associated with RA can be associated with:

- dryness, pain and redness of the eyes
- vision impairment and light sensitivity
- dryness, infection and/or gum irritation in the mouth
- small lumps under the skin over bony areas of the body called rheumatoid nodules
- shortness of breath caused by inflammation and scarring of the lungs
- nerve damage caused by inflammation of blood vessels
- anemia

([Arthritis Foundation, n.d.](#))