Life with Arthritis in Canada: A Personal and Public Health Challenge

PUBLIC HEALTH AGENCY of CANADA
AGENCE DE LA SANTÉ PUBLIQUE du CANADA

S O’Donnell, C Lagacé, C Bancej, L McRae, P Stewart
and the Arthritis in Canada Editorial Board
CPHA Centennial Conference
June 14th, 2010
Outline

• Background
• Objectives and structure of the report
• Data sources used
• Key findings
• Challenges in determining the impact of arthritis
• Acknowledgements
Background

• Public health surveillance – a core component of the Public Health Agency of Canada’s (PHAC) mandate.

• Surveillance is the tracking or forecasting of health events or determinants through:
  – Regular collection of best available data;
  – Integration, analysis and interpretation into surveillance products; and
  – Dissemination to those who need to know.

• National surveillance of arthritis began in 2001.
Objective of national report on arthritis

• Provide an overview of the burden of arthritis on the Canadian population.

• Describe approaches to reduce the risk of developing arthritis and the adverse consequences.
Structure of report

Executive summary
Introduction
1: Prevalence and projections
2: Prevention and management
3: Disability and quality of life
4: Arthritis among First Nations, Métis and Inuit
5: Mortality
6: Economic burden
7: Prescription medication use
8: Ambulatory care services
9: Hospital services
Data sources
Glossary
Data sources used

- **Canadian Institute for Health Information:**
  - Canadian Joint Replacement Registry
  - Canadian Mortality Database
  - Discharge Abstract Database
  - Hospital Morbidity Database
- **Economic Burden of Illness in Canada custom tabulations**
- **IMS Health Canada Canadian Disease & Therapeutic Index**
- **Provincial physician claims data**
- **National Surveys:**
  - Aboriginal Peoples Survey
  - Canadian Community Health Survey
  - First Nations Regional Health Survey
  - Participation and Activity Limitations Survey
What is arthritis?

• “Arthritis” includes more than 100 rheumatic diseases/conditions that affect a joint or joints, causing pain, swelling and stiffness.

• Common types include osteoarthritis and rheumatoid arthritis.
How common is it?

- Second and third most common chronic condition in women and men, respectively.
- 4.2 million (16%) Canadians aged 15+ affected – projected to increase to 7 million (20%) in 2031.

Source: PHAC using CCHS 2007-2008, Statistics Canada
Prevalence and number with arthritis

• Prevalence increased with age.

• Almost two thirds (64%) of those affected were women.

• Nearly 3 in 5 (58%) were < 65 years.

Source: PHAC using CCHS 2007-2008, Statistics Canada
‘E’ – Interpret with caution
Prevalence of arthritis by province/territory

Risk factors

Non-modifiable:
• Age
• Sex
• Hormones
• Ethnicity and race
• Genetics

Modifiable:
• Physical inactivity
• Excess body weight
• Joint injury (OA)
• Purine rich diet (gout)
• Smoking (RA, SLE)
Physical inactivity

A higher proportion with arthritis were physically inactive compared to those without (59% vs. 49%).

Source: PHAC using CCHS 2007-2008, Statistics Canada
Overweightness/obesity

A higher proportion with arthritis were overweight or obese compared to those without (63% vs. 49%).

Source: PHAC using CCHS 2007-2008, Statistics Canada
Arthritis-related ambulatory visits, 2005/06

• Approx. 14% of Canadians aged 15+ made at least one arthritis-related visit to a physician:
  – An estimated total of 8.5 million visits in Canada (excluding territories).

• The majority (80%) saw a primary care physician.

• Of the specialist seen, orthopaedic surgeons were more commonly consulted than general internists or rheumatologists.

Source: PHAC using provincial physician data (AB, MB, ON, QC, NS)
Arthritis-related hospitalizations

• In 2005-06, there were 2.2 million hospitalizations in Canada; of these, 132,000 (6%) were associated with arthritis.

• Of all arthritis-related hospitalizations, surgical hospitalizations (71%) were more common than medical ones.

Source: Arthritis Community Research Evaluation Unit using Hospital Morbidity Database, CIHI.
Arthritis-related hip and knee joint replacements

- In 2005-06, 59,200 joint replacements for arthritis were performed, of which, 97% were hip or knee replacements.
- Between 2001 and 2005, the total number of hip and knee replacements increased by 54%.

Source: Arthritis Community Research Evaluation Unit using Hospital Morbidity Database, CIHI.
Challenges in determining the impact of arthritis

- The term “arthritis” covers a wide range of different conditions.

- Arthritis is not always recorded as the underlying diagnosis in admin databases (i.e., physician visits, death).

- Currently, not possible to track and provide information on the different types of arthritis due to a lack of data.

- Surveillance data on arthritis in children is not currently available at the national level.
Summary

• In 2007-08, over 4.2 million Canadians (16%) age 15+ reported that they have arthritis of which:
  – Nearly 2/3 were women and 3/5 were under 65 years.

• A higher proportion of Canadians with arthritis were physically inactive (59%) and overweight/obese (63%) compared to individuals without arthritis (49% for both factors).

• Approx. 14% of Canadians age 15+ visited a physician (usually a primary care physician) at least once for arthritis in 2005-06.

• In 2005-06, arthritis was associated with over 6% (132,000) of the total hospitalizations in Canada and between 2001 and 2005, the total number of joint replacements increased by 54%.
Acknowledgments

**Editorial board:** Lagacé C, O’Donnell S, McRae L, Badley E, Mackay C, Dale V, Johnson S, Koehn C, Légaré J, Moore L, Webster G.


**Data analysis:** Nichol M, Walsh P, Gopinath S, Przybysz R, Rochette L, Wang Y.

**Editing:** Sales P (English), Lagacé C (French).

**Admin assistance:** Lange A.
Contact information

Public Health Agency of Canada,
Centre for Chronic Disease Prevention & Control,
Chronic Disease Surveillance & Monitoring Division

Siobhan O’Donnell, Epidemiologist
T.: (613) 954-6557
E.: siobhan.odonnell@phac-aspc.gc.ca

PHAC website: www.phac-aspc.gc.ca