Linking the 1991 Census to the Canadian Cancer Registry to Advance Knowledge About Cancer in First Nations and Métis Adults in Canada

Diana Withrow (diana.withrow@cancercare.on.ca)
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Presentation Overview

- Cancer registration in Canada
- First Nations and Métis in Canada
- Cancer surveillance in First Nations & Métis
  - What is the challenge?
  - What do we know so far? How did we find out?
  - What do we want to know? How will we find out?
“Organic heart disease, diabetes, chronic kidney disease and cancer are not major causes of death among Indians, as they are among white people. They appear among those Indian communities who have acquired a fair amount of white blood. It would be very interesting to study this problem from a scientific standpoint. If, for example, it could be discovered why Indians, relatively speaking, do not have cancer, it might be possible to find why white people have it in apparently increasing numbers.”
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Cancer registration in Canada

- 13 provincial and territorial cancer registries
- Patient-oriented since 1992
  - Cancers dating back to 1968
- Routine national death clearance
- Scale: ~ 145K cases added annually
  - 162K in California alone
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Nomenclature

Aboriginal people in Canada

First Nations
- Registration
- On Reserve

Métis
- Registration

Inuit
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The Challenge

No ethnic identifier in the Canadian cancer registry
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Ex: Registered First Nations in Ontario

Indian Register – Ontario Portion
1968-1991

Ontario Cancer Registry
1968-1991

Cancer incidence in Ontario First Nations, 1968-91: All Cancers

Cancer Incidence in Ontario First Nations, 1968-91, by cancer type

All cancer trends in Ontario First Nations, 1968-91

Females

Males

Rates standardized to the World Standard Population

Colorectal cancer incidence in Ontario First Nations, 1968-91

Females

Males

Year of diagnosis

Year of diagnosis

Rates standardized to the World Standard Population

Ex: Registered First Nations in Ontario

Indian Register – Ontario Portion

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What do we want to know?

• National perspective
• Rarer cancer sites
• Trends over time
• Geographic patterns
• Hard to identify groups (i.e. Métis, non-Status First Nations)
Objectives

1. **Describe** cancer incidence and survival among FN&M adults in Canada

2. Examine patterns in cancer incidence and survival among FN&M over time, by region and compared to non-Aboriginals
How will we find out?

Canadian Census of the Population (Long Form) 1991

Canadian Cancer Registry 1991-2009
Census-based Identifier

• National coverage
• Captures multiple dimensions of aboriginality
  ▪ Ancestry
  ▪ Registration (FN only)
  ▪ Band/First Nation membership
• Large sample size
  ▪ 15% sample of the 1991 Canadian population aged >25
  ▪ 2.7M adults overall, ~62,000 FN and ~12,000 Métis
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