

# Oral Health for Frail Older Adults

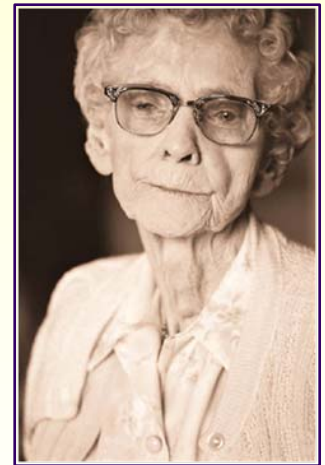
## Introduction to Oral Health

### Is oral health an issue ?

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Donna Scott

January 19, 2009

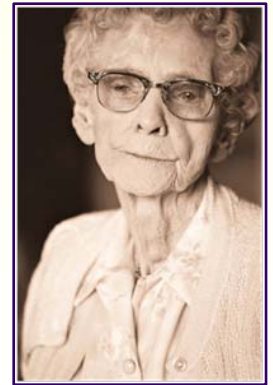


Oral Health for Frail Older Adults 4-Part IPNE Series  
January-February 2009



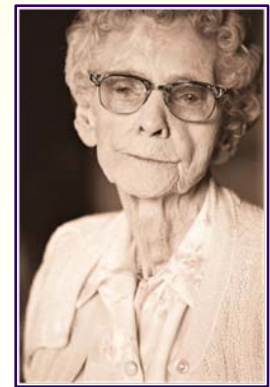
# Learning Objectives

- To understand the impact of oral health on the frail older adult
- To recognize the oral health issues faced by frail older adults



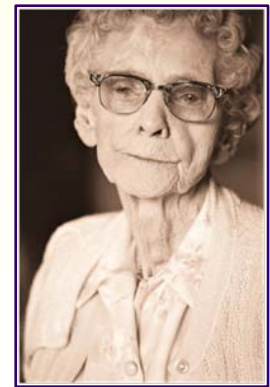
# Check your understanding

1. Considering all health expenditures for cardiovascular care, mental health, cancer, diabetes, pulmonary diseases & oral care, oral care expenditures rank:
  - A) 1<sup>st</sup>
  - B) 2<sup>nd</sup>
  - C) 3<sup>rd</sup>
  - D) 4<sup>th</sup>



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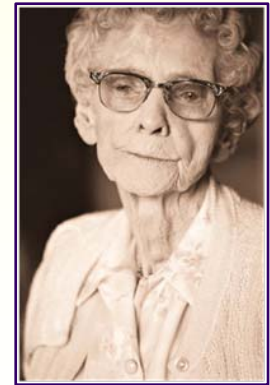
2. 88% of older adults visit a physician annually. What percentage visit a dentist annually ?

A) 10 %

B) 30 %

C) 50 %

D) 70 %



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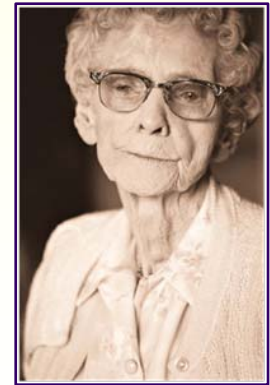
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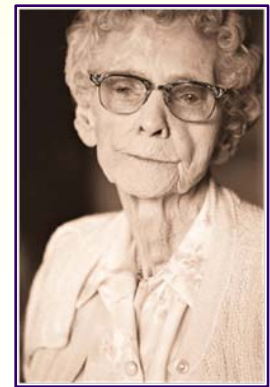
C) 50 %

D) 70 %



# Check your understanding

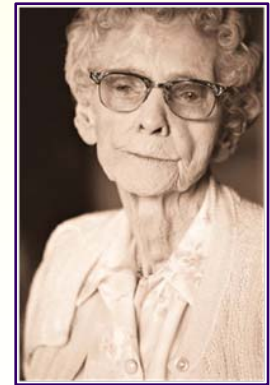
3. What percentage of older adults do not perceive a need for dental care ?
- A) up to 25 %
  - B) up to 50 %
  - C) up to 75 %
  - D) up to 90 %



# Check your understanding

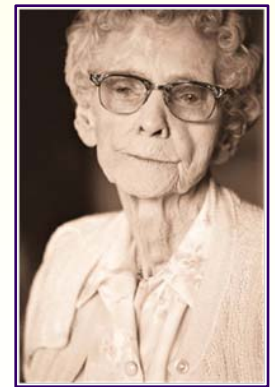
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- D) **up to 90 %**



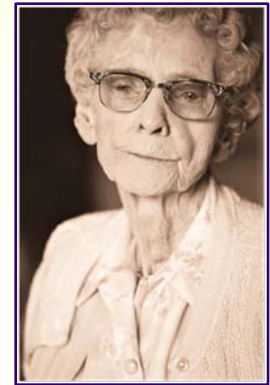
# Check your understanding

4. An older adult has 32 natural teeth.  
What is the minimal number of teeth  
needed to maintain functional dentition?
- A) 15-16
  - B) 20-21
  - C) 25-26
  - D) 30-32

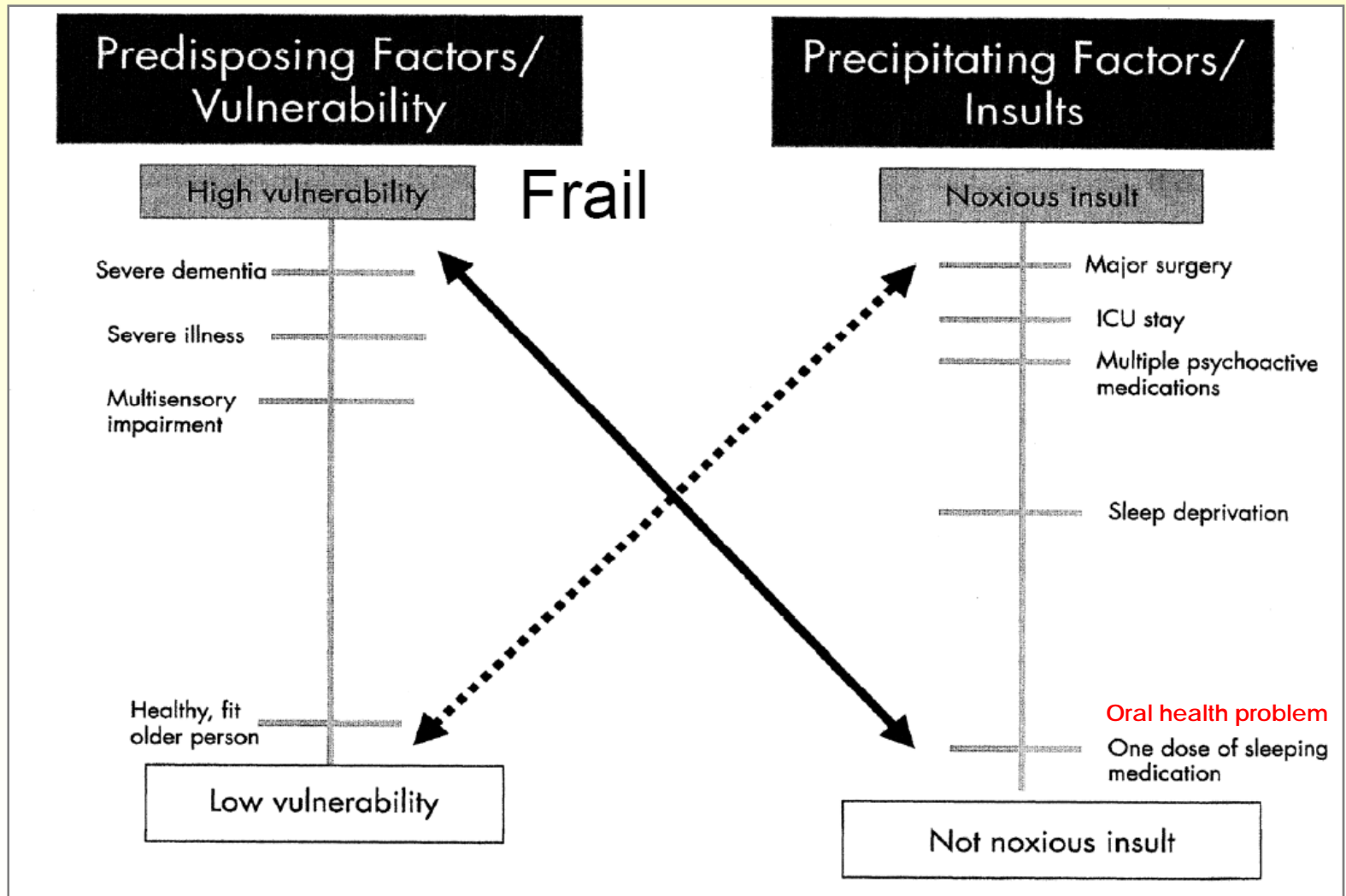


# Check your understanding

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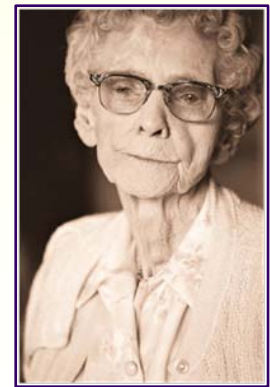
# Frailty Vulnerability: Oral Problems as Insults



Neuropsychiatric Aspects of Delirium, Paula T. Trzepacz et al, APA Textbook of Neuropsychiatry and Clinical Neurosciences.

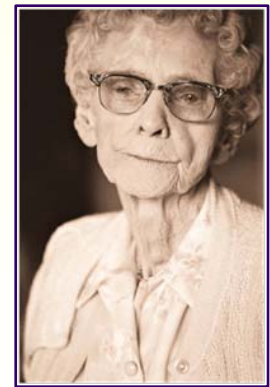
# Is oral care an issue ?

- Oral diseases are progressive and cumulative if untreated and become more complex over time.
- Research has shown an important link between oral disease and systemic diseases
  - heart disease, diabetes and aspiration pneumonia.
- Oral function in older adults is influenced by 2 key variables:
  - Number & distribution of remaining in natural teeth
  - The quantity and the quality of the saliva present



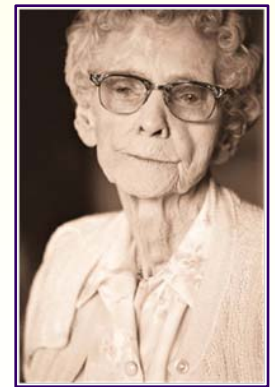
# Is oral care an issue ?

- The number of teeth is inversely related to the likelihood of weight loss
  - Poor oral health is an important contributing factor to involuntary weight loss
  - Nutrition and food choices
- **Weight loss is an important predictor for mortality**
  - 4-5% weight loss is associated with a doubling in mortality over 1-3 years
- **Upper body obesity is associated with increased risk for periodontitis**



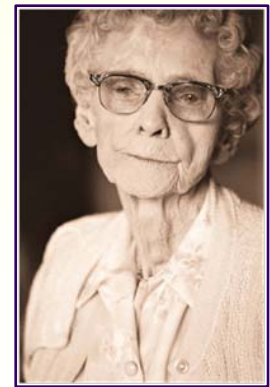
# Is oral care an issue ?

- More older adults are retaining a greater percentage of their natural teeth
  - Dental implants
- As a result:
  - Tooth decay is more than 3 times greater for older adults than for those under 45 years & exceeds tooth decay rates of adolescents.
  - Older adults with tooth decay and oral pain have compromised chewing,



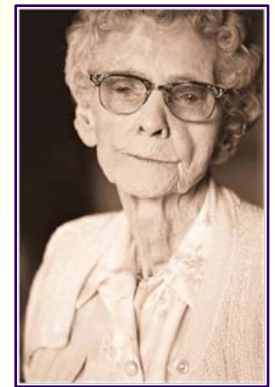
# Is oral care an issue ?

- The presence and incidence of periodontal conditions (e.g., caries) in older adults related to
  - poor oral hygiene and
  - high levels of dental plaque
- The removal of dental plaque becomes a more difficult challenge
  - age-related toothbrush abrasion
  - gingival recession
  - salivary dysfunction
  - dexterity disabilities, and
  - cognitive impairment
- Use more restorative, prosthetic and oral surgery, services than any other age group



# Is oral care an issue ?

- Saliva plays an essential role in the maintenance of oral health
- More than 400 medications especially those for chronic diseases, can lead to
  - xerostomia or dry mouth
  - oral infections and tooth decay



# Is oral care an issue ?

## Medications That Impact Oral Health

### Xerostomia (Dry Mouth)

Managing the oral side effects from medications is important to maintain Residents' good oral health. Medication induced xerostomia (dry mouth) is a common side effect of many medications.

Classification	Generic Name	Brand Name	Classification	Generic Name	Brand Name
Anorexiant	Phentemine	Adipex-P Ionamin	Antinauseant	Dyphenhydramine	Dramamine
	Phendimetrazine	Fastin Anorex SR Bontril PDM		Meclizine	Antivert

Antianxiety

Anticholinergic /  
Antispasmodic

Anticonvulsant

Antidepressant

Antidiarrheal

Antihistamine

Antihypertensive

Antiinflammatory An

Other common oral  
effects of medication

References:  
Braine, T., More oral /  
Registered Nurses Ass  
The University of Iowa  
Author / Gerontologic

## Oral Health of Older Adults Primary Care

### Medications That Impact Oral Health



### Xerostomia (Dry Mouth)

Managing the oral side effects from medications is important to maintaining good oral health of frail older adults. Medication-induced xerostomia is a common side effect of many medications:

Classification	Generic Name	Brand Name	Classification	Generic Name	Brand Name
Anorexiant	phentemine	Adipex-P Fastin Ionamin Zanryl Anorex SR Adipost	Antiinflammatory Analgesic	ibuprofen	Motrin
	phendimetrazine	Bontril PDM		naproxen	Naprosyn
Antianxiety	mazindol	Mazanor	Antinauseant	piroxicam	Feldene
	hydroxyzine	Atarax		dyphenhydramine	Dramamine
	lorazepam	Ativan	Antiparkinsonian	meclizine	Antivert
	prazepam	Centrax		biperiden	Akineton
	halazepam	Paxipam	Anti-Psychotic	trihexyphenidyl	Artane
	oxazepam	Serax		benztropine mesylate	Cogentin
	diazepam	Valium		clozapine	Clozaril
Anticholinergic / Antispasmodic	atropine	Atropisol		lithium	Eskalith
	hyoscyamine	Anaspaz		haloperidol	Haldol
Anticonvulsant	oxybutynin	Diropan	Bronchodilator	chlorpromazine	Thorazine
	felbamate	Felbatol		ipratropium	Atrovent
	lamotrigine	Lamictal	Decongestant	albuterol	Ventolin
	carbamazepine	Tegretol	Diuretic	pseudoephedrine	Sudafed
Antidepressant	clomipramine	Anafranil		chlorothiazide	Diuril
	amitriptyline	Elavil	Muscle Relaxant	furosemide	Lasix
	fluoxetine	Prozac		cyclobenzaprine	Flexeril
Antidiarrheal	doxepin	Sinequan	Narcotic Analgesic	orphenadrine	Norflex
	loperamide	Immodium AD		merperidine	Demerol
Antihistamine	diphenoxylate with atropine	Lomotil	Sedative	morphine	MS Contin
	diphenhydramine	Benadryl		flurazepam	Dalmane
	loratadine	Claritin		triazolam	Halcion
Antihypertensive	terfenadine	Seldane		temazepam	Restoril
	aprotinil	Capoten			
	prazosin	Minipress			
	reserpine	Serpasil			
Other common oral adverse side effects of medications	Dental caries Alterations in taste Difficulty with chewing	Oral ulcerations Atrophic mucosa Hair tongue	Burning mouth / tongue Difficulty with speech Difficulty with swallowing	Opportunistic infection Gingival enlargement Mucositis /	Bleeding Stomatitis

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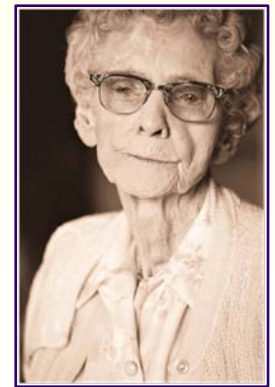
Source: Registered Nurses Association of Ontario. (2007).

Oral Health: Nursing Assessment and Interventions. Toronto, ON: Author. [www.mao.on.ca](http://www.mao.on.ca)



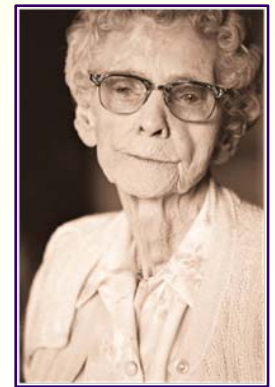
# Is oral care an issue ?

- The need for dentures and associated discomfort has become an accepted part of aging.
- Denture wearers frequently report nothing is wrong with their uncomfortable dentures.
- It is no longer appropriate to equate geriatric dental care with denture care.



# Is oral care an issue ?

- Oral disease, pain and dysfunction can have an acute impact on the quality of life of older adults.
- How? It affects:
  - Chewing & eating
  - Speaking
  - Sleeping
  - Self esteem
  - Social interactions & relationships.



# Is oral care an issue ?

## Oral Health of Older Adults

### Primary Care: Quick Facts

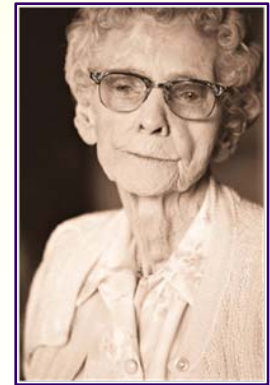
- Compared with other age groups, older adults have **less access** to oral care services and **poorer oral health status**
  - 30% visited a dentist compared to 88% visited a physician annually;
  - 75% of senior men and 83% of senior women have **no dental insurance**;
  - Many standard dental **treatment options** are invasive, complex, expensive and often, not available to non-ambulatory older adults living independently; and
  - Up to 90% of older adults **don't perceive the need** for dental care.
- Nearly 7% of all health expenditures are for oral health care, **ranking 2nd** in diagnostic categories behind cardiovascular care and **exceeding** mental health, cancer, diabetes and pulmonary diseases.
- Research has shown the important **link between** oral disease and systemic diseases such as heart disease, diabetes and respiratory diseases,
  - Oral diseases are **progressive** and **cumulative** if untreated and become more complex over time, and
  - Poor oral health is an important contributing factor to involuntary weight loss.
- Oral disease, pain and dysfunction can have an acute impact on the **quality of life** of older adults, **affecting** their chewing, eating, speaking, self-esteem, health, social interactions and relationships.
- More older adults are **retaining** a greater percentage of their natural teeth than those of previous generations.
  - **Tooth decay** is more than 3 times greater for older adults than for those under 45 years and exceeded tooth decay rates of adolescents;
  - Older adults with **tooth decay** and **oral pain** have compromised chewing, possibly causing them to try to swallow larger amounts of food and inadvertently **aspirate**; and
  - Denture-wearers frequently report that nothing is wrong with their **uncomfortable dentures** because such discomfort has become an **accepted** part of aging.
- More than 400 medications commonly used by older adults especially those used for chronic conditions can result in a **dry mouth**, which can lead to **oral infections** and **tooth decay**.
- **Oral cancer** has a high mortality rate with the 5-year survival rate is below 50%. If detected early, the 5-year survival increases dramatically to 80%.
- Oral health of older adults with **dementia** declines as their dementia progresses, due to poor oral hygiene and reliance on others.
- **End-of-life** oral care treatments need to focus on improving **oral comfort** and be consistent with the older adult's end-of-life care wishes.

References and resources: [www.rgpc.ca](http://www.rgpc.ca)

Primary Care Oral Health of Older Adults Resource Kit



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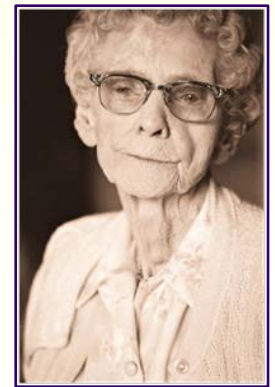
# Is oral care an issue ?

## Poor dental literacy

Frail older adults?

Health care providers?

Oral health providers?



# Contact Information

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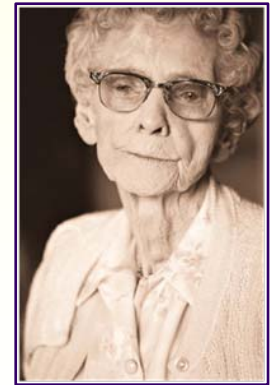
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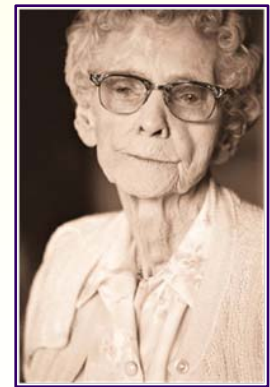
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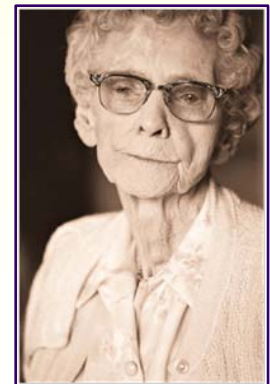
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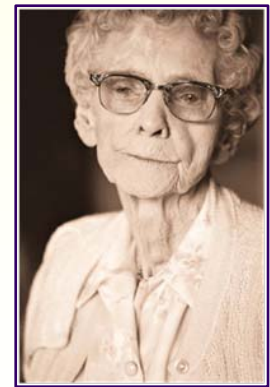
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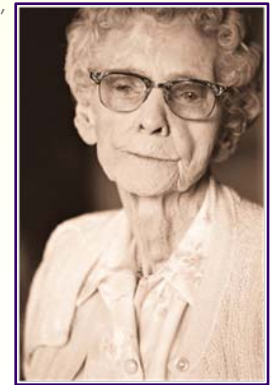
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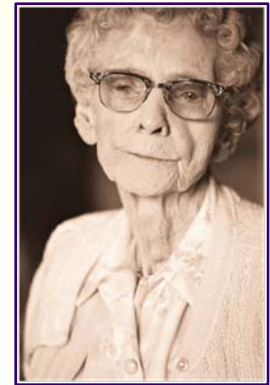
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## Website Resources

Regional Geriatric Program Central: [www.rgpc.ca](http://www.rgpc.ca) (long-term care and primary care)

Regional Geriatric Programs Toronto (GiiC link): [www.rgp.toronto.on.ca](http://www.rgp.toronto.on.ca) (primary care)

Halton Region Health Department – Dental Health: [www.halton.ca/health/services/dental/](http://www.halton.ca/health/services/dental/)

Centre for Community Oral Health- Long Term Care Fact Sheets, University of Manitoba  
[www.umanitoba.ca/faculties/dentistry/ccoh](http://www.umanitoba.ca/faculties/dentistry/ccoh)

Registered Nurses Association of Ontario: [www.rnao.org](http://www.rnao.org) (best practice guidelines)

