AGING VIGNETTE #66

Barriers to Seniors' Autonomy: Chronic Pain

Chronic pain: What? Who? What are the effects?

- Chronic pain has a serious impact on one's physical and emotional well-being. It can affect all aspects of an individual's life, ranging from home and work to social activities.
- Two major sources of chronic pain include migraine headaches and arthritis.
- The prevalence of chronic pain increases with age. The rate at ages 15 to 24 is 10%. It increases to 29% for seniors aged 65-74 and to 35% for those aged 75+.
- The spectrum of painful conditions changes in old age: while headaches and some forms of back pain become less frequent, pain associated with osteoarthritis, rheumatism, angina, and vascular disease becomes more prevalent. In fact, 27% of men and 34% of women aged 65+ experience chronic pain. (1994/95 data)
- In 1994-95, among all age groups, women (20%) were more likely to report pain than men (15%).
- The health problems which cause chronic pain rarely cause death.
- People with chronic pain experience more disability days, spend more time in hospital, and have more frequent doctor contacts than those who don't experience chronic pain.

Sources:

Millar, W. Chronic Pain. *Health Reports*. 7,4, (1996): 47-53.

Roy, R. *Chronic Pain in Old Age: An Integrated Biopsychosocial Perspective*. Toronto: University of Toronto Press, 1995.

AGING VIGNETTE #67

Barriers to Seniors' Autonomy: Chronic Pain

How severe is chronic pain?

- Among Canadian men aged 65+ who experience chronic pain:
  35.5% have mild pain
  47.5% have moderate pain
  17% have severe pain.

- Among Canadian women aged 65+ who experience chronic pain:
  26.5% have mild pain
  54.4% have moderate pain
  18% have severe pain.

- People most frequently report having 'moderate' pain. It is the case for:
  54% of men and 56% of women aged 65-74 and
  41% of men and 53% of women aged 75+.

- Severe pain is more common among those aged 45+. Percentages of 'severe' chronic pain reports are:
  8% for those aged 15 to 24
  20% for those aged 45 to 64
  17% for those aged 65 to 74
  20% for those aged 75+.

Source:
Millar, W. Chronic Pain. *Health Reports*. 7, 4, (1996): 47-53.

AGING VIGNETTE #68

Barriers to Seniors' Autonomy: Musculoskeletal Disorders — Arthritis

How many people have arthritis?

- Arthritis is ranked as one of the top three chronic conditions in Canada, along with fever and allergies, and circulatory disorders.
- 1 in 7 Canadians are afflicted with arthritis.
- In 1991, 1.2 million seniors had arthritis. This represented 37.5% of Canada's senior population.
- By 2031, there will be approximately 8.3 million seniors in Canada; it is estimated that 3.2 million seniors will have arthritis. This will represent 38.5% of Canada's senior population.

Sources:

Badley E. and M. Crotty. An International Comparison of the Estimated Effect of the Aging of the Population on the Major Cause of Disablement, Musculoskeletal Disorders. *Journal of Rheumatology*. 22,10, (1995): 1934-1940.

Badley, E., I. Rasooly and G. Webster. Relative Importance of Musculoskeletal Disorders as a Cause of Chronic Health Problems, Disability and Health Care Utilization: Findings from the Ontario Health Survey. *Journal of Rheumatology*. 21, (1994): 505-514.

Badley, E. The Economic Burden of Musculoskeletal Disorders in Canada is Similar to that for Cancer, and May Be Higher. *Journal of Rheumatology*. 22, 2, (1995): 204-206.

Spitzer, W. et al. The Arthritic Complaint in Primary Care: Prevalence, Related Disability, and Costs. *Journal of Rheumatology*. 3, (1976): 88-89.

Statistics Canada. *Population Projections for Canada, Provinces and Territories (1993-2016)*. Cat. No. 91-520. Ottawa: 1994.

AGING VIGNETTE #69

Barriers to Seniors' Autonomy: Musculoskeletal Disorders — Arthritis

What are the most common forms of arthritis?

1) **Osteoarthritis (OA)**, a chronic disease which causes the deterioration of cartilage, a tough, elastic material that caps the end of each bone in a joint. The deterioration of cartilage causes the unprotected bone ends to rub against one another, resulting in the breakdown of the joint structure. It affects 10% of Canada's population.

   It is estimated that 85% of Canadians will be affected by OA by age 70.

2) **Fibromyalgia**, a disease characterized by tender spots that hurt only when pressure is applied. This aching sensation is usually felt in the muscles and joints, and pain can last for weeks, months and even years. It affects 3% of Canadians.

3) **Rheumatoid arthritis (RA)**, an autoimmune disease where the body's immune system causes the body to attack itself instead of foreign cells. RA causes inflammation of the lining of the joint capsule. Inflammation makes the nerve endings sensitive and causes pain when the aggravated joint is moved or touched. The outcome of continuous inflammation is damage or destruction of joints. It affects 1% of Canadians.

Source:
The Arthritis Society. Highlights on the Different Forms of Arthritis. *Arthroscope*. September 1995.

AGING VIGNETTE #70

Barriers to Seniors' Autonomy: Musculoskeletal Disorders — Arthritis

What are the effects of arthritis?

- The disability caused by arthritis accounts for more than 25% of all long-term disability in Canada.
- More than 75% of Canadians with disability due to arthritis are dependent on others because of their condition.
- Among people with arthritis:
  - 90% have trouble with mobility
  - 66.6% have trouble or are unable to climb stairs
  - 62.7% have trouble or are unable to stand for long periods of time
  - 51.0% have trouble or are unable to bend to pick up an object
  - 17.4% have trouble or are unable to dress.
- More than 25% (155,000) of people disabled by arthritis who need help with day-to-day activities live alone.
- 73% of people with arthritis never go to sporting events, movies, concerts or plays.

What are some of the economic impacts?

- In 1986, over 50% of adult Canadians with arthritis had incomes less than $20,000.
- In 1986, arthritis cost Canadians an estimated $5 billion or 1% of Canada's gross national product.

Sources:

Badley, E. Arthritis Care and Research, (work in progress)

Badley, E., I. Rasooly and G. Webster. Relative Importance of Musculoskeletal Disorders as a Cause of Chronic Health Problems, Disability and Health Care Utilization: Findings from the Ontario Health Survey. *Journal of Rheumatology*. 21, (1994): 505-514.

Badley E. and M. Crotty. An International Comparison of the Estimated Effect of the Aging of the Population on the Major Cause of Disablement, Musculoskeletal Disorders. *Journal of Rheumatology*. 22, 10 (1995): 1934-1940.

Badley, E. The Effect of Osteoarthritis on Disability and Health Care Use in Canada. *Journal of Rheumatology*. (suppl. 43) 22, (1995): 19-22.

Badley, E. The Economic Burden of Musculoskeletal Disorders in Canada is Similar to that for Cancer, and May Be Higher. *Journal of Rheumatology*. 22, 2 (1995): 204-206.

Felts, W. et al. The Economic Impact of Rheumatic Diseases in the U.S. *Journal of Rheumatology*. 16, (July 1989): 867-884.

AGING VIGNETTE #71

Barriers to Seniors' Autonomy: Musculoskeletal Disorders — Osteoporosis

Osteoporosis: What? Who? Consequences?

- Osteoporosis is the reduction of bone mass which ultimately leads to fractures after minimal trauma.
- Approximately 1,000,000 Canadians over the age of 50 suffer from the disease; 80% are women.
- Osteoporosis is the most common metabolic bone disease in seniors. It affects an estimated 25% of postmenopausal women in North America.
- The major consequence of osteoporosis is hip fracture.
- More than 95% of these fractures occur in women over the age of 50.
- Mortality in the first year after the fracture may be as much as 20% for women and 34% for men.
- Several studies have found that only 50% of patients return to their pre-injury functional status.
- In Canada, the costs of the 25,000 hip fractures which occurred in 1990 is estimated at about $400 million.
- Current costs are expected to double over the next 30 years unless comprehensive programs addressing prevention and treatment are initiated.

Sources:

Dorland's Illustrated Medical Dictionary. Toronto: W.B. Saunders Co., 1988.

Lau, E. et al. The Effects of Calcium Supplementation and Exercise on Bone Density in Elderly Chinese Women. *Osteoporosis International*. 2, (1992): 169-173.

Narod, S. and R. Spasoff. Economic and Social Burden of Osteoporosis. In *Current Concepts in Bone Fragility*. (1984): 391-401. Springer Verlag, N.Y.

Riggs, B. and L. Melton. The Prevention and Treatment of Osteoporosis. *New England Journal of Medicine*. 327, (1992): 620-627.

Riggs, B. and L. Melton. Involutional Osteoporosis. *New England Journal of Medicine*. 314, (1986): 1676-1684.

Statistics Canada, CCHI. *Hospital Morbidity 1989-1990*, Reference Table by Diagnostic Codes (3 digits), Sex and 5 Year Age Groupings for the Provinces. Ottawa: 1992.

Tenenhouse, A. Commentary on The Canadian Multicentre Osteoporosis Study. *Osteoform*. 1, 2, (1996).

AGING VIGNETTE #72

Barriers to Seniors' Health: Musculoskeletal Disorders — Osteoporosis

Who is at greater risk of getting osteoporosis?

- The characteristics of those at risk of getting osteoporosis are:
  - being age 50 or older
  - being a female
  - having a family history of osteoporosis
  - being past menopause
  - having the ovaries removed, or having reached menopause before age 45
  - having prolonged hormonal imbalances
  - having a small bone structure
  - being Caucasian or of Eurasian background
  - having insufficient dietary calcium
  - having limited exposure to sunlight or insufficient dietary vitamin D
  - not having enough physical activity
  - being a smoker
  - taking caffeine (consistently more than three cups a day of coffee, tea or colas)
  - taking alcohol (consistently more than two drinks a day)
  - making excess use of certain medications (cortisone and prednisone, thyroid hormone, anticonvulsants, aluminum-containing antacids).

Source:
Osteoporosis Society of Canada. *Building Better Bones: A Guide to Active Living.* 1996. No. 1.

AGING VIGNETTE #73

Barriers to Seniors' Autonomy: Falls and Home Injuries

How many seniors fall?

- Between 23.1% to 39.2% of seniors living in the community had fallen on at least one occasion during the year. (1989 data)

What causes falls?

- Falls can be caused by intrinsic and extrinsic factors. Intrinsic factors are related to the individual whereas extrinsic factors incorporate causes which are external to the person such as the physical environment.

- Examples of intrinsic factors which are associated with falls include: age, impaired mobility, dizziness, balance problems, inactivity, eyesight problems, cognitive impairment, depression, chronic illness and a risk-taking personality style.

- Examples of extrinsic factors are: unkept sidewalks, poor walking surfaces, stairs, poor lighting, obstructions in pathways, the lack of handrails, low beds and seats, poor footwear and medications.

Sources:
Gallagher, E. *Falls and the Elderly: Community Paper Series, Paper #3.* Victoria: University of Victoria, Centre on Aging, 1995.
Statistics Canada. *Causes of Death, 1993.* Cat. No. 84-208. Ottawa: October 1995.

AGING VIGNETTE #74

Barriers to Seniors' Autonomy: Falls and Home Injuries

What are the mortality rates?

- For both sexes, the mortality rates from accidental falls increase with age. Of the deaths from accidental falls, in 1993:

  among men:
  35.7% were experienced by men aged 65+
  16.3% were experienced by men aged 90+
  and among women:
  51.6% were experienced by women aged 65+
  34.8% were experienced by women aged 90+.

In 1989:

- Falls were the leading cause of accidental death for both men and women aged 65+. For men, falls accounted for 48% of accidental deaths, for women 65%.

- The fall-related mortality rate for men aged 85+ was 20 times higher than the rate for men aged 65 to 74.

- Among women aged 85+, the rate was 44 times higher than the rate for women aged 65 to 74.

- The rate of death from falls, for all age groups, has declined significantly in recent decades. From 1969 to 1989, there occurred:
  a 47% decline in deaths from falls among seniors 65-74
  a 25% decline in deaths from falls among seniors 75+.

Sources:
Riley, R. Accidental Falls and Injuries Among Seniors. *Health Reports*. 4, 4 (1992).
Tait, H. *Injuries and Seniors: The Canadian Context*. Ottawa: Product Safety Bureau, [Health Canada], 1993.

AGING VIGNETTE #75

Barriers to Seniors' Autonomy: Falls and Home Injuries

How many injuries are due to falls?

- Like death rates, the fall-related injury rates increase with age:
  272.8 per 100,000 for those aged 0 to 64
  958.6 per 100,000 for people aged 65 to 74
  3419.0 per 100,000 for those aged 75+. (1989 data)

Are there differences between men and women?

- The rate of injuries due to falls is higher for women aged 75+ than for men in the same age group. The reverse is true for the 0-64 age group. In 1989, the rate of injuries due to falls was:
  4,040 per 100,000 women aged 75+
  2,386 per 100,000 men aged 75+.

- Fall-related **mortality** rates for those 65+ are higher for men than women, but the hospital admittance rates are higher for women than men.

- The reasons for these differences are not fully understood; it has been suggested that although women fall more than men, more men seriously injure themselves.

- One reason for women's higher rate of falling is the greater incidence of osteoporosis among the female senior population.

Sources:
Tait, H. *Injuries and Seniors: The Canadian Context.* Ottawa: Product Safety Bureau, [Health Canada], 1993.
Riley, R. Accidental Falls and Injuries Among Seniors. *Health Reports.* 4, 4, (1992).

AGING VIGNETTE #76

Barriers to Seniors' Autonomy: Falls and Home Injuries

Hospitalization resulting from falls?

- In 1987-88, the hospitalization rate from falls was higher than the rate from motor vehicle injuries.
- The hospitalization rate from falls among seniors is small: approximately 2% of seniors who experience a fall are eventually admitted to hospital. However, many are treated in a physician's office or in an emergency room and are not included in hospitalization rates.

What injuries result from falls?

- Among men and women aged 65+ who were hospitalized for accidental falls, the most prevalent injury reported was fracture of the hip.
- For men 65+, other most prevalent injuries were fractures of the upper arm, forearm, the pelvis, and the ankle.
- For women 65+, other most prevalent injuries from accidental falls were fractures of the ribs, the vertebral column, the upper arm, and the pelvis.

Sources:
Josephson, K., D. Fabacher and L. Rubenstein. Home Safety and Fall Prevention. *Clinics in Geriatric Medicine*. 7,4, (1991): 707-731.
Riley, R. Accidental Falls and Injuries Among Seniors. *Health Reports*. 4, 4, (1992): 341-353.

AGING VIGNETTE #77

Barriers to Seniors' Autonomy: Falls and Home Injuries

Home injuries: Who? Where? When? Consequences?

- In 1988, the home accident rate for seniors was 3%.
- The age group with the highest rate of home injuries are those 15-24 years of age with a rate of 44 per 1,000.
- In 1991, 160,111 seniors reported having had at least one home and surrounding area injury during the past 12 months (which represented 5% of males 65+ and 7% of females 65+ in Canada).
- In 1991, 45% of all accidents reported by seniors took place in the home or surrounding area. This compares to:
  8% for those 15-24
  13% for those 25-44
  18% for those 45-65.
- A larger percentage of seniors' injuries occurred indoors rather than outdoors.
- Among seniors, home injuries occurred in the kitchen more than in any other room in the house (14%).
- Seniors in rural areas are as likely as those in urban areas to report a home injury.
- The number of days of activity lost (per 1000 days) from home injuries is higher for seniors:
  352 per 1,000 days for those 15 to 24
  775 per 1,000 days for those 65+.

Source:
Tait, H. *Injuries and Seniors: The Canadian Context.* Ottawa: Product Safety Bureau, [Health Canada], 1993.

AGING VIGNETTE #78

Barriers to Seniors' Autonomy: Depression

What is depression?

- **Depression** is a mental state of depressed mood characterized by feelings of sadness, despair, and discouragement. Depression ranges from normal feelings of 'the blues' to major depression.

- Symptoms of depression may be recurring, prolonged, and severe. Literature distinguishes between those forms of depression which do not disrupt personal and social relations (such as a mild and situational depression) and those which are more serious and debilitating. These latter are often called clinical depression and consist of three main types: major depressive disorder, bipolar disorder, and dysthymia.

Are seniors more depressed than others?

- Studies have shown that younger age groups, such as the 25-44 have greater depression rates (approximately 10%), compared to approximately 5% among those 65+.

What causes depression?

- Depression can occur in some persons after the loss of a loved one, or the loss of certain capacities or roles.

- Other factors which make people vulnerable to depression are:
  - cerebral biochemical imbalances which may influence mood and be transmitted genetically
  - certain personality types: those who are hard on themselves, or very self-critical, and those who are usually passive and dependent
  - state of health is a predictor of depression among seniors; illness can influence the emergence of depression by interfering with the sources of self-fulfilment and self-esteem.

Sources:

Cappeliez, P. Depression, Loneliness and Grief Among the Elderly. In National Advisory Council on Aging (ed.), *Mental Health and Aging*. Ottawa: 1991.

Canadian Mental Health Association. *Depression: An Overview of the Literature.* Ottawa: Health Canada, 1995.

Dorland's Illustrated Medical Dictionary. Toronto: W.B. Saunders Co., 1988.

AGING VIGNETTE #79

Barriers to Seniors' Autonomy: Depression

What are some symptoms of depression?

The following table includes **symptoms of depression** which are more serious and tend to persist.

1	**Changes in behaviour**	• general sluggishness (or agitation) • loss of interest and pleasure in activities that used to provide some • withdrawal, decrease in social activities
2	**Emotional changes**	• acute sadness or feeling of emptiness • demoralization, despair • irritability • anxiety
3	**Mental changes**	• concentration difficulties and memory loss • self-criticism, self-depreciation • suicidal thoughts
4	**Physical changes**	• sleep disorders such as insomnia, and abnormal early waking • chronic fatigue, lack of energy • lack of interest in sexual activity • physical discomfort such as constipation, headaches and others

Source:
Cappeliez, P. Depression, Loneliness and Grief Among the Elderly. In National Advisory Council on Aging (ed.), *Mental Health and Aging*. Ottawa: 1991.

AGING VIGNETTE #80

Barriers to Seniors' Autonomy: Depression

What are some treatments available to seniors with depression?

- **Physical interventions** include anti-depressant medication or electroshock therapy.

- **Cognitive therapy** aims to assist depressed persons in identifying and testing the negative views they have of themselves, the future and the world, and to examine the attitudes and beliefs on which their feelings of self-worth are based.

- **Behavioral therapy** attempts to convince people to step up their level of activity and to develop better coping skills, particularly social skills.

- **Psychodynamic therapy** seeks to modify the personality structure with a view to facilitate functioning; it involves recognition and alteration of the defence mechanisms.

- Despite the need for intervention and treatment, many seniors do not seek professional help.

Sources:

Meyers, B. and B. Alexopoulos. Geriatric Depression. *Medical Clinics of North America*. 72, (1988): 847-865.

Rockwell, E. et al. Antidepressant Drug Studies in the Elderly. *Psychiatric Clinics of North America*, 11, (1988): 215-233.

AGING VIGNETTE #81

Barriers to Seniors' Autonomy: Depression

How can depressed seniors help themselves?

- Surround yourself with a strong network of social supports: people with broad social networks enjoy better physical and mental health.
- Seek solutions to your problems instead of just trying to control your emotions.
- Keeping an open mind about life experiences seems to be an important coping strategy to counteract depression and the tendency to close in on oneself.
- Make new acquaintances: isolation increases vulnerability to depression.
- Pursue activities you like, particularly ones that put you in contact with others.
- Try to make your own decisions. Often, good decisions can be made after gathering new information and opinions from others.
- Take risks and try new things, without necessarily expecting to be successful immediately.
- Don't be afraid to ask for help; asking for help is a sign of health and maturity, a way of being in control.

Source:
Cappeliez, P. Depression, Loneliness and Grief Among the Elderly. In National Advisory Council on Aging (ed.), *Mental Health and Aging*. Ottawa: 1991.

AGING VIGNETTE #82

Barriers to Seniors' Autonomy: Safety Issues

How safe from crime do seniors feel?

- A 1993 survey showed that 1 in 4 Canadians feel somewhat or very unsafe when walking alone in their neighbourhoods after dark.

- The fear of crime is more of a serious problem for seniors. They were almost twice as likely to indicate feeling 'unsafe' when walking alone in their area after dark. Percentages were:
  41% for the 65+
  23% for the 15 to 24
  23% for the 25 to 44
  26% for the 45 to 64.

- There are significant gender differences:
  19% of men vs 57% of women 65+ feel very unsafe when walking alone in their area at night; however,
  89% of senior men vs 80% of senior women are very or somewhat satisfied with their safety.

- The following percentages show seniors' satisfaction with measures they took to increase their safety from crime. In 1993:
  51% were satisfied with locking doors for safety when alone in the car
  39% were satisfied with checking backseat for intruders
  41% were satisfied with planning a route with safety in mind
  17% were satisfied with staying home at night
  71% were dissatisfied with staying home at night
  7% were satisfied with carrying something to defend themselves/alert others.

- 51% of urban seniors perceived an increase in crime over the past five years in their neighbourhood, 38% perceived the crime level to be the same, and 3% perceived the crime level to have decreased.

- 38% of rural seniors perceived an increase in crime over the past five years in their neighbourhood, 55% perceive it as the same and a statistically insignificant number thought the level of crime had decreased.

Sources:
Sacco, V. Fear and Personal Safety. *Juristat*. 15, 9 (March 1995).
Hung, K. and S. Bowles. Public Perceptions of Crime. *Juristat*. 15, 1 (January 1995).
Kong, R. Urban/Rural Criminal Victimization in Canada. *Juristat*. 14, 17 (December 1994).

AGING VIGNETTE #83

Barriers to Seniors' Autonomy: Safety Issues

How do Canadians protect themselves from criminal victimization?

Population 15+ by measures ever taken to protect person or property from crime and by gender and age, Canada, 1993

Population	Changed Activities or Avoided Certain Places (%)	Installed New Locks (%)	Installed Burglar Alarms (%)	Obtained A Dog (%)	Taken Self-Defence Course (%)	Changed Phone Number (%)	Obtained Gun (%)
Total Population	38	32	15	12	10	9	2
Gender							
Male	33	32	16	11	11	7	3
Female	44	33	14	14	9	11	1
Age							
15-24	43	23	11	12	17	10	1
25-44	42	35	16	14	11	11	2
45-64	36	36	17	14	7	9	3
65+	**25**	**30**	**15**	**6**	**3**	**3**	**2**

General Social Survey, Statistics Canada, 1993.

- The data in the previous table does not show any evidence that older Canadians are more likely to engage in precautionary behaviour than other age groups.

- The most common measures taken by Canadians of all ages:
  installing new locks (32%)
  changing activities or avoiding certain places (38%)
  installing alarms (15%).

- Compared to the total population, seniors are less likely to take a self-defense course, obtain a dog or change their telephone number.

Source:
Sacco, V. Fear and Personal Safety. *Juristat*. 15, 9 (March 1995).

AGING VIGNETTE #84

Barriers to Seniors' Autonomy: Sensory Loss — Vision

What are normal visual changes, and what are not?

- By the age of 50, many people have become aware of vision changes. Typical changes include:
  - a gradual decline in the ability to see small print or focus on close objects (presbyopia).
  - a decrease in the sharpness of vision
  - the need for more light for certain activities like reading or driving
  - some trouble distinguishing subtle colour differences (e.g. blue may appear gray)
  - the incidence of double vision or 'haloes' around bright lights.

- In addition to the normal changes mentioned above, older eyes are at greater risk for health disturbances:
  - Minor irritations like dry eyes, excessive tearing, and 'floaters' respond well to self-care and cause no permanent loss of vision.
  - More serious health problems, such as cataracts, glaucoma, and macular degeneration require professional attention to prevent vision loss or blindness.

Sources:

Mettler, M. and D. Kemper. *Healthwise for Life: Medical Self-care for Healthy Aging*. Boise, ID: Healthwise Inc., 1992.

Naeyaert, K. Living with Sensory Loss: Vision. In National Advisory Council on Aging (ed.), *Living with Sensory Loss*. Ottawa: 1990.

AGING VIGNETTE #85

Barriers to Seniors' Autonomy: Sensory Loss — Vision

Who suffers from visual impairment? How many?

- In 1986, there were an estimated 3,316,870 persons with disabilities in Canada. Of those, 581,110 reported a visual impairment.
- Visual impairment affects 9% of the Canadian population aged 65+, or one senior in eleven.
- 25% of falls causing injury among seniors are attributed to vision problems.
- Over 50% of the adult population with a visual disability who reside in households are aged 65+.
- The age distribution of visually impaired individuals indicates that 38.1% of people became functionally visually impaired after their 64th birthday.

Sources:

Naeyaert, K. Living with Sensory Loss: Vision. In National Advisory Council on Aging (ed.), *Living with Sensory Loss*, Writing in Gerontology No. 8. Ottawa: 1990.

Statistics Canada. *Blindness and Visual Impairment in Canada*. Cat. No. 82-615, 3. Ottawa: 1990.

AGING VIGNETTE #86

Barriers to Seniors' Autonomy: Sensory Loss — Vision

What causes vision impairment?

- Visual impairments that occur among older adults include: macular degeneration, glaucoma, presbyopia and diabetic retinopathy.

- Presbyopia is an impairment of vision due to advancing years. It affects everyone sometime after the age of 40. As the eye ages, the lens becomes less flexible and can no longer easily focus on near objects or small print.

- Among seniors, 6% lose their vision as a result of cataracts. Cataracts are thickened, hardened and cloudy parts of the eye lens. The cloudy lens blocks or distorts light coming into the eye and blurs vision. Cataracts usually develop in both eyes and develop at different rates.

- Glaucoma affects 7% of seniors. It is an eye disorder caused by increased pressure within the eyeball. If the pressure is not relieved it can result in blindness.

- Macular degeneration causes 45% of all visual impairments. It is the most common cause of blindness in Canada, accounting for 33 to 34% of the total incidence. It is caused by damage or breakdown of the macula, the part of the retina that provides clear, sharp central vision. It may occur in one or both eyes.

- Diabetic retinopathy is a possible complication of diabetes. It is present in 90% of those who have had the disease more than 20 years. It occurs when the retina does not get enough oxygen. Symptoms include clouding of vision and seeing spots. Diabetic retinopathy blinds 400 Canadians every year.

Sources:

Canadian National Institute for the Blind. *Diabetes and the Eye*. Ottawa: 1988.

Canadian National Institute for the Blind. *Macular Degeneration*. Ottawa: 1988.

Mettler, M. and D. Kemper. *Healthwise for Life: Medical Self-care for Healthy Aging*. Boise, ID: Healthwise Inc., 1992.

Naeyaert, K. Living with Sensory Loss: Vision. In National Advisory Council on Aging (ed), *Living with Sensory Loss*. Ottawa: 1990.

Statistics Canada. *Blindness and Visual Impairment in Canada*. Cat. No. 82-615, 3. Ottawa: 1990.

AGING VIGNETTE #87

Barriers to Seniors' Autonomy: Sensory Loss — Hearing

What types of hearing loss are there?

- There are three types of hearing loss: conductive, sensorineural and central deafness.
- Conductive hearing loss results from the blockage or interference of sound to the inner ear. People with conductive hearing loss often complain that their own voice sounds loud while other voices sound muffled. There may be a low level of tinnitus or ringing in the ear.
- Most hearing loss is sensorineural. This means that it is caused by problems of the nervous system in the inner ear. People with sensorineural hearing loss generally do not suffer from total deafness. They may have trouble understanding the speech of others while being very sensitive to loud sounds. The person may hear clicking, ringing or hissing noises. The loss occurs bilaterally and symmetrically.

What causes hearing impairment?

- Central deafness is caused by damage to the hearing centers in the brain and is quite rare. The person with central deafness can hear normally but has difficulty understanding what is heard.
- Causes of conductive hearing loss include: packed ear wax in the ear canal, infection, abnormal bone growth and excessive fluid in the ear.
- Sensorineural hearing loss can be a result of changes that come with age, environmental noise and some medications, specifically Aspirin.
- Central deafness is attributed to stroke, lengthy high fever or a blow to the head.

Sources:

Mettler, M. and D. Kemper. *Healthwise for Life: Medical Self-care for Healthy Aging*. Boise, ID: Healthwise Inc., 1992.

Statistics Canada. *Canadians with Impaired Hearing*. Cat. No. 82-615, 5. Ottawa: 1992.

AGING VIGNETTE #88

Barriers to Senior's Autonomy: Sensory Loss — Hearing

How many people have hearing impairment?

- Approximately 4 out of every 100 Canadians (1,022,220) have impaired hearing, which establishes this disability as among the most prevalent in the nation.
- The rate of impaired hearing is less than 1% for those under age 25 residing in households, and 47.5% for those 85+.
- 27.8% of persons with hearing impairment state that the difficulty began at or after age 65.
- Among seniors living in institutions,
  46.5% of women and
  41.6% of men have a hearing impairment.

# of Adults Residing in Households with a Hearing Impairment	860,855
% of those who use sign language	3.5%
% of those who use lipreading	12.0%
% of those using technical aids	30.3%
of those using technical aids % who use hearing aids	88.9%
% who use volume controls on telephones	31.5%
% who use amplifiers	2.6%
% who use telecommunication devices	1.88%

Source:
Statistics Canada. *Canadians with Impaired Hearing*. Cat. No. 82-615, 5. Ottawa: 1992.

AGING VIGNETTE #89

Barriers to Seniors' Autonomy: Sensory Loss — Smell and Taste

What are smell and taste disorders?

- The most common sensory complaints are a loss of the sense of smell and the sense of taste. Testing may demonstrate a reduced ability to detect odours, or to taste sweet, sour, bitter or salty substances. Some people can detect no odours or no tastes.

What causes smell and taste disorders?

- The sense of smell is most accurate between the ages of 30 and 60 years. A natural decline in smelling ability typically occurs after age 60.

- Many people develop a taste or smell disorder as a result of an injury or illness. Upper respiratory tract infections or an injury to the head are sometimes responsible for smell or taste problems.

- Loss of smell or taste may result from polyps in the nasal or sinus cavities, hormonal disturbances or dental problems.

- Prolonged exposure to certain chemicals such as insecticides or some medicines can also play a key role.

- Tobacco smoking impairs the ability to identify odours and diminishes the sense of taste.

- Many persons who receive radiation therapy for cancers of the head and neck later complain of lost smell and taste. They can also be lost in the course of some diseases of the nervous system.

Sources:

American Academy of Otolaryngology-Head and Neck Surgery, Inc. *Smell Taste Disorders*. VA, U.S.: 1995.

National Institute on Deafness and Other Communication Disorders. *Smell and Taste Disorders*. MD, U.S.: 1996.

AGING VIGNETTE #90

Barriers to Seniors' Autonomy: Sensory Loss — Smell and Taste

Are smell and taste disorders serious?

- A person suffering from a smell or taste disorder is deprived of an early warning system that many take for granted. Smell and taste alert us to fires, poisonous fumes, leaking gas, and spoiled food and beverages.
- Smell and taste disorders may also lead to depression.
- Smell and taste disorders can be indicators of a more serious health problem such as obesity, diabetes, hypertension, malnutrition, and some degenerative diseases of the nervous system such as Parkinson's disease and Alzheimer's disease.

Sources:

American Academy of Otolaryngology-Head and Neck Surgery, Inc. *Smell Taste Disorders.* VA, U.S.: 1995.

National Institute on Deafness and Other Communication Disorders. *Smell and Taste Disorders.* MD, U.S.: 1996.

AGING VIGNETTE #91

Barriers to Seniors' Autonomy: Sensory Loss — Smell and Taste

Can smell and taste disorders be treated?

- If the cause of a smell or taste disorder is a certain medication, improvement should occur when the drug has been stopped.
- Some people, particularly those with serious respiratory infections or seasonal allergies, regain their smell or taste simply by waiting it out.
- In some cases where there is a nasal obstruction such as polyps surgical removal is used to restore airflow to the receptor area and correct the loss of smell and taste.
- Occasionally, senses return to normal just as spontaneously as they disappeared.

Sources:
American Academy of Otolaryngology-Head and Neck Surgery, Inc. *Smell Taste Disorders.* VA, U.S.: 1995.
National Institute on Deafness and Other Communication Disorders. *Smell and Taste Disorders.* MD, U.S.: 1996.

AGING VIGNETTE #92

Barriers to Seniors' Autonomy: Incontinence

What is incontinence?

- Incontinence is the loss of bladder/and or bowel control. It is not a disease, but rather a symptom of other problems occurring in the body.

- The prevalence of incontinence increases with age.

Are there different types of incontinence?

- Stress incontinence refers to the loss of urine when sneezing, coughing, laughing, lifting, jogging, bending or anything that causes the abdominal pressure to exceed that of the bladder's closure mechanism.

- Urge continence is associated with a strong desire to empty the bladder and not being able to delay long enough to get to the toilet.

- Overflow incontinence is the frequent loss of urine without the urge to void.

- Total incontinence refers to the complete absence of urine control, with continuous leakage or periodic uncontrolled emptying of the bladder's contents.

- Enuresis is a term most commonly used to describe bedwetting in children, and adults who experience a loss of bladder control at night.

- Faecal incontinence is a term used to describe the leakage of faecal matter at times other than during a bowel movement.

Sources:
The Simon Foundation for Continence Canada. *You Are Not Alone - You Can Do Something about It: Facts on Incontinence*. 1995.
Mettler, M. and D. Kemper. *Healthwise for Life: Medical Self-care for Healthy Aging*. Boise, ID: Healthwise Inc., 1992.

AGING VIGNETTE #93

Barriers to Seniors' Autonomy: Incontinence

What causes incontinence?

- Two main factors contribute to incontinence: immobility and impaired mental functioning.
- Other causes of incontinence include infections, damage to the pelvic muscles, medication side effects (diuretics), diabetes or obesity, birth defects, injury, stress or pregnancy, delirium, stool impaction, stones in the urinary tract, and prostate problems with men or disorders of the pelvic floor in women.
- Many persons in nursing homes develop urinary incontinence, even though they were previously continent.
- Many causes of incontinence can be cured, or at least controlled.

Sources:

Borrie, M. and H. Davidson. Incontinence in Institutions: Costs and Contributing Factors. *Canadian Medical Association Journal*, 147, 3, (1992).

Mettler, M. and D. Kemper. *Healthwise for Life: Medical Self-care for Healthy Aging.* Boise, ID: Healthwise Inc., 1992.

Barrie, M.J., T. Ostbye and D. Nowick. Urinary and Faecal Incontinence in Canadian Institutionalized Elderly. *Canadian Medical Association Journal*, in press.

U.S. Department of Health and Human Services. *Urinary Incontinence in Adults.* Rockville, MD: Agency for Health Care Policy and Research, Public Health Service, 1992.

AGING VIGNETTE #94

Barriers to Seniors' Autonomy: Incontinence

How many seniors experience incontinence?

- An estimated one million Canadians are affected by incontinence.
- In Canada, 20 % of seniors experience incontinence.
- In households
  17.7% of females and
  8% of males have urinary incontinence.
- Among seniors living in institutions,
  37% of men and women have daily urinary incontinence;
  61% of those with urinary incontinence also have faecal incontinence.

Sources:
Tully, P. and C. Mohl. Older Residents of Health Institutions. *Health Reports*, 3, 2 (1995): 27-30.
Kok, A. et al. Urinary and Faecal Incontinence in Community-residing Elderly Women. *Age and Aging*, 21,3, (1992): 211-215.
Barrie, M.J., T. Ostbye and D. Nowick. Urinary and Faecal Incontinence in Canadian Institutionalized Elderly. *Canadian Medical Association Journal*, in press.

AGING VIGNETTE #95

Barriers to Seniors' Autonomy: Incontinence

What is the cost of incontinence?

- One billion dollars is spent annually in Canada on the management of urinary incontinence.
- Financial costs include laundry, incontinence supplies, clothing and linen, and nursing time for those persons in institutions.
- Psycho-social costs include embarrassment, social isolation, poor quality of life and risk of institutionalization.
- Potential physical costs include rash and skin irritation or urinary tract infections.

Sources:

Borrie, M. and H. Davidson. Incontinence in Institutions: Costs and Contributing Factors. *Canadian Medical Association Journal*, 147, 3, (1992).

Herzog, A. et al. Methods Used to Manage Urinary Incontinence by Older Adults in the Community. *American Geriatrics Society*, 37: 1989.

AGING VIGNETTE #96

Barriers to Seniors' Autonomy: Incontinence

What treatments are available for incontinence?

- Incontinence is a condition which has received little attention because people are to embarrassed to talk about it. At times it is seen as a condition of aging and not treated.

- The disorder may be transient, or secondary to a reversible cause such as medication or an acute illness. It may also last indefinitely if not treated.

- Measures for prevention/improvement/cure include bladder training, pelvic muscle exercises, biofeedback, adjustment of medications, and avoidance of coffee or tea which stimulate the bladder.

- Other forms of treatment include the use of various catheters, medications, surgical treatment and the use of adult incontinence supplies such as diapers.

- It is important to note that the long term use of catheters can lead to urinary tract infections. This has decreased the use of catheters but increased the use of other products such as incontinence pads.

Sources:

Fonda, D., J. Ouslander and C. Norton. Continence Across the Continents. *American Geriatrics Society*, 42,1, (1994).

Mettler, M. and D. Kemper. *Healthwise for Life: Medical Self-care for Healthy Aging*. Boise, ID: Healthwise Inc., 1992.

U.S. Department of Health and Human Services. *Urinary Incontinence in Adults*. Rockville, MD: Agency for Health Care Policy and Research, Public Health Service, 1992.