



BEST PRACTICES

Treatment and Rehabilitation
for Seniors with Substance
Use Problems



Best Practices
Treatment and Rehabilitation for Seniors with
Substance Use Problems

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maintain and improve their health.

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Également disponible en français sous le titre
*Meilleures pratiques B Traitement et réadaptation des personnes âgées ayant des
problèmes attribuables à la consommation de drogues*

This publication can be made available (in/on computer
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Publications
Health Canada
Ottawa, Ontario
K1A 0K9

Tel.: (613) 954-5995
Fax: (613) 941-5366

This publication is also available on internet at the following address:
www.hc-sc.gc.ca/cds

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Cat. H46-2/03-295E
ISBN 0-662-33394-2

Acknowledgements

This report involved the collaborative efforts of the Office of Canada's Drug Strategy, Health Canada, and W. Morrison & Associates. Health Canada would like to express appreciation to the project steering committee, the key experts who participated in the interviews, and the Federal/Provincial/Territorial Committee on Alcohol and Drug Issues.

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Executive Summary

- ◆ The purpose of this project is to identify best practices in treatment and rehabilitation for seniors with substance use problems. It includes issues related to the accessibility and provision of services.
- ◆ The central components, supports and principles associated with effective and comprehensive service delivery systems are identified by synthesizing the literature and key expert perspectives.
- ◆ The outcomes of the research are intended to be a resource for service providers and program planners who deliver specialized substance abuse programs to seniors.

*

- ◆ Most seniors do not abuse substances, however, for those with substance use problems, alcohol is the substance most commonly used.
- ◆ Medications most commonly prescribed to seniors are heart medication, blood pressure medication, pain relievers and benzodiazepines.
- ◆ Early-onset drinkers tend to have a treatment history for alcohol use and less social supports. Late-onset drinkers may develop problems as a reaction to loss or stress, but tend to retain more supportive social networks.
- ◆ The reasons a senior develops a substance use problem are complex, however, certain risk factors have been identified, such as death of a spouse, retirement, chronic health problems, or losses in the social network.
- ◆ Prolonged substance use, intoxication or withdrawal may induce symptoms that can be misattributed to other chronic conditions or the aging process.
- ◆ Given the number of losses and challenges seniors may face, many exhibit resiliency adapting; these strengths should be drawn upon in substance abuse treatment.
- ◆ Seniors benefit from age-specific interventions, and service providers should be trained in both gerontology and substance use issues.
- ◆ Harm reduction is recognized as an effective approach for improving outcomes.

- ◆ Programs should provide transportation and/or outreach services, and adopt a client-centred, holistic treatment approach that improves overall quality of life.
- ◆ The role of the physician is central for ongoing medical care, assessments and effective service delivery.
- ◆ Greater collaboration and communication among professionals are needed to create a comprehensive continuum of care for seniors.
- ◆ It is important to increase awareness among members of the public generally, and seniors specifically, around seniors' substance use problems.
- ◆ Public information and education must be specific to seniors rather than generic to all adults.
- ◆ Further research is needed to develop new, or modify existing, assessment tools to more accurately reflect the needs of seniors.

1. Project Background and Description

1.1 Introduction

The purpose of this project is to identify best practices related treatment and rehabilitation for seniors with substance use problems and to identify specialized substance abuse treatment programs for seniors in Canada. The project was initiated by Health Canada as part of a research agenda developed by the Federal/Provincial/Territorial Committee on Alcohol and Other Drug Issues.

The project was carried out under the direction of the Working Group on Accountability and Evaluation Framework and Research Agenda (ADTR Working Group). The working group is appointed by the Federal/Provincial/Territorial Committee on Alcohol and Drug Issues. Part of the mandate of the working group is to oversee the development and implementation of research studies that contribute to innovative substance abuse treatment and rehabilitation programs by identifying best practices, evaluating model treatment and rehabilitation programs, and identifying emerging issues; the knowledge is then disseminated across the country.

This project builds on a series of best practices publications including: *Best Practices – Substance Abuse Treatment and Rehabilitation* (Health Canada, 1999a); *Best Practices – Fetal Alcohol Syndrome/Fetal Alcohol Effects and the Effects of Other Substance Use During Pregnancy* (Health Canada, 2001a); *Best Practices – Treatment and Rehabilitation for Women with Substance Use Problems* (Health Canada, 2001b); *Best Practices – Treatment and Rehabilitation for Youth with Substance Use Problems* (Health Canada, 2001c), *Best Practices Concurrent Mental Health and Substance Use Disorders* (Health Canada 2001), and *Best Practices Methadone Maintenance Treatment* (Health Canada, 2002).

1.2 Project Goal

The goal of this project is to make current information on best practices associated with treatment and rehabilitation for seniors with substance use problems available across Canada. The outcomes from the research are intended to be a resource for service providers and program planners who deliver specialized substance abuse programs. The best practice guidelines were identified by reviewing current literature and interviewing key informants on the issue of seniors with substance use problems and synthesizing the results.

1.3 Sources of Information

1.3.1 Literature Review

The literature review analyzes research related to treatment and rehabilitation for seniors with substance use problems, and identifies current practices and potential implications for effective service delivery. Specific criteria were developed for the selection of the key articles. These criteria formed a basis from which to evaluate the literature in terms of scientific rigour and significance.

The research activities included:

- ◆ a detailed review of relevant published and unpublished reports; and
- ◆ an examination of specific substance use issues and data.

The review considered both research and professional documents from Canadian and international literature, including:

- ◆ post 1990 publications (with the exception of two noteworthy studies from 1988 that were identified as pertinent in recent literature);
- ◆ professionally reviewed or expert juried research documents;
- ◆ summary articles of gerontology research and treatment outcome research;
- ◆ experimental studies;
- ◆ comparison studies of different approaches or methods;
- ◆ quasi-experimental investigations;
- ◆ program evaluation reports; and
- ◆ theoretical literature directly relating to best practice research.

Several databases were searched, using keywords pertaining to seniors, substance use and treatment, including:

- ◆ PsycInfo (database of psychological research);
- ◆ DrugInfo (Drug information database from University of Minnesota);
- ◆ CCSADOCS (database of the National Clearinghouse on Substance Abuse);
and
- ◆ CANBASE (database of the Canadian Substance Abuse Information Network).

Several university databases were used to search for publications, including:

- ◆ EBSCO (social sciences journal database);
- ◆ Novanet (for Dalhousie University and affiliates); and
- ◆ Eloize (Université de Moncton).

1.3.2 Key Expert Interview Methodology

A list of key experts was identified in consultation with members of ADTR Working Group. Representatives from each province and territory with expertise in the area were contacted. Twenty-nine key experts participated, and their insights reflect their various backgrounds, training and experience. The key experts were contacted by phone to establish the most convenient method for administering the questionnaire. All respondents were given the time and opportunity to provide detailed information for each question. Most interviews were completed over the telephone, while some of the respondents preferred to answer the questionnaire in written form. Interviews were conducted in either French or English, given the preference of the interviewee. Interview duration ranged from one to three hours, with the average length 80 minutes.

1.3.3 National Program Inventory

The national program inventory describes programs and specialized services in Canada available to seniors with substance use problems. Key personnel in each program were contacted and asked to provide a profile of their program by completing a survey questionnaire.

1.4 Project Definitions: Treatment and Best Practice

1.4.1 Definition of Treatment

For the purposes of this project, treatment is defined as an organized set of approaches and strategies that assist clients to reduce or eliminate problematic use of substances, and that support healthy personal and interpersonal functioning. Although the term substance use treatment implies a single entity, in fact, it includes a complex and variable network of services.

As defined in Canada's Drug Strategy (Health Canada, 1998), treatment and rehabilitation services in Canada include:

... detoxification services, early identification and intervention, assessment and referral, basic counselling and case management, therapeutic intervention, and aftercare and clinical follow-up. Treatment is offered on an out-patient, day-patient, or in-patient basis, including short-term and long-term residential care. (Health Canada, 1998:9)

1.4.2 Definition of Best Practice

The definition of best practice as it relates to program delivery in the health field has been approached with varying degrees of rigour.

Within health care, the application of the idea of “best practice” has ranged from simply publishing particular practices under the rubric of “best”, ... to engaging in a systematic identification of what would constitute “best” within a particular health issue or practice area, ... to a rigorous research-based investigation to identify evidence associated with particular practices (Varcoe, 1998:4).

For the purposes of this project, best practices are emerging guidelines, gleaned from key expert perspectives and supported by the literature, on the approaches and elements of treatment that appear to result in successful treatment outcomes for seniors. Given this definition, best practices are recommendations that may evolve, based on ongoing key expert experience, judgment and perspective, and continued research.

1.5 Project Limitations

This literature review cannot be taken as a definitive analysis of the links between substance use problems and gerontology. The emphasis is on the substance use problems literature. However, it identifies several links that warrant further research (e.g., resilience).

2. Review of the Literature

2.1 Introduction

Key Points

- ▶ The proportion of seniors in Canadian society is increasing. This shift in population implies that effective substance abuse services for seniors will be needed.
- ▶ Currently, the misuse of prescription and over-the-counter medications is recognized as a problem. Baby boomers are likely to have had more contact with illicit substances than the present seniors cohort. Therefore substance abuse services in the future may need to anticipate and address problems associated with licit and illicit substances.
- ▶ Different cohorts have different views of substance use problems. Some view such problems as a moral weakness, others as a disease, and others from a biopsychosocial perspective.

2.1.1 Terminology

A variety of terms pertaining to seniors with substance use problems was found in the literature. There was variation in what the researchers or authors designated as senior or older adult. Most researchers used lower cut off ages of 65 or 60, however, some used 55 or 50.

There was diversity in the terms for problem substance use, including, for example, problem alcohol use, alcohol abuse, drug use, substance use and medication misuse. Medication problems tend to use terms such as non-compliance, abuse and misuse. These differences have implications for interventions. “Non-compliance” refers to neglecting to fill a prescription, filling it but not taking the medication, or taking the medication in a manner other than that prescribed (Tamblyn & Perrault, 1998). Patterns are labelled “abuse” if they are a result of deliberate, excessive ingestion of medication. “Misuse” includes use due to misinformation or misunderstanding, and may occur when patients do not inform their doctor about all the medications they are taking (Barnea & Teichman, 1994; Ruben, 1992).

2.1.2 Young-Old versus Old-Old

Neugarten (1996) developed the typology of “young-old” and “old-old” for those over 55 years of age. The generally accepted transition age from young-old to old-old is 75 years. There are clearly problems with using chronological age as a marker. Some researchers in the field of aging see this model as too simplistic, while others find it helps conceptualize older adults and seniors, which includes an age span of about 40 years. There will be significant diversity among that age span, and functionally those at 65 may have more in common with someone 45 than someone 85. However, the opposite can also be true. A useful generalization is that those who are old-old will likely suffer a greater impact from health or substance use problems than those who are young-old. While the gerontology literature often makes this distinction, the substance use literature on seniors often does not.

2.1.3 Demographics on Aging

People aged 65 and over comprise 12.5% of the Canadian population (65-74: 7%, 75-84: 4%, 85+ : 1.4%) (Statistics Canada, 2002), but with the large number of aging baby boomers, this proportion is expected to rise. Statistics Canada has projected that by 2021 seniors will represent 18.9% of the total population, and that by 2041 will represent 24.9% of the population (Statistics Canada, 2002). In 2000, women constituted the larger proportion of seniors, accounting for 53% of those over 65 to 74, 60% of those 75 to 84 years of age, and 70% of those 85 and over (Statistics Canada, 2002).

Substance use problems are an important factor in later life health issues. One study found that substance use was the third leading cause of health problems in Americans 55 years of age and older (King, Van Hasselt, Segal & Hersen, 1994). In Canada, it is estimated that more than \$300 million a year is spent on substance abuse treatment (Rush & Ogborne, 1992). The characteristics and prevalence of substance use problems in seniors needs to be determined to ensure effective treatment and rehabilitation services.

2.1.4 Different Cohorts, Different Views

Rush & Ogborne (1992) report that for many who lived during the era of Prohibition, alcoholism was viewed as a moral weakness. Prohibition was common in many areas of Canada and was not repealed until the early 1920s (Rush & Ogborne, 1992). In the 1940s, Alcoholics Anonymous emerged and shifted perceptions to alcoholism as a disease. The corresponding shift in public perception made it more acceptable to seek treatment, but the personal views of some seniors may still reflect a moral bias. This may contribute to a reluctance to seek treatment for substance use problems (Widner & Zeichner,

1991). Another cohort, the baby boomers, begins to turn 60 in 2006. This generation matured during a time of social upheaval and tend to have different attitudes toward substance use (Patterson & Jeste, 1999).

Perceptions of substance use, misuse, abuse, and dependence change with the times (e.g. change in views of alcoholism as moral corruption in the times of prohibition, to alcoholism as a disease, to alcoholism as a multidimensional biopsychosocial problem). Similarly, opinions about marijuana use have changed from the 1950s to the 1960s and 1970s, to the new millennium where we now have regulations for medical marijuana. Currently, definitions of problem use usually refer to impaired control over consumption, or to continued use despite negative consequences. (Fingerhood, 2000; Kostyk, Lindblom, Fuchs, Tabisz & Jacyk, 1994). The term “binge drinker” is relatively new and refers to someone who does not necessarily drink regularly but drinks excessively (the equivalent of four drinks or more) (Blow et al., 2000). Fingerhood (2000) reports that the problem with such a variety of terms to describe drinking behaviour is that it allows for subjective interpretation by researchers and creates a lack of consistency across studies. “At the core of the problem is accurately defining what is being measured: Is it alcohol abuse, alcohol dependence, alcoholism, heavy drinking or a drinking problem?” (Fingerhood, 2000, p. 985).

In many areas the disease model of addiction is prominent. Another emerging perspective is the biopsychosocial model, which incorporates biological and physiological mechanisms, psychological processes (learning, conditioning, modelling, and coping with stress), and social and environmental processes (interpersonal relationships and broader culture). This perspective highlights the multidimensional nature of causes and treatments (Rush & Ogborne, 1992).

2.1.5 Outline of Review

The review of the literature is organized as follows: Section 2 describes issues relevant to the aging population, Section 3 profiles the patterns of substance use in seniors, Section 4 describes physical and health issues related to substance use, Section 5 describes risk factors that may precipitate substance use problems in seniors, Section 6 describes screening tools and diagnostic criteria, Sections 7 and 8 discuss treatment issues and approaches, Section 9 focusses on barriers to treatment, and Section 10 discusses the issue of substance use problems within Canada’s Aboriginal population.

2.2 The Aging Population

Key Points

- ▶ With physiological aging, there is a reduction in the proportion of body water, resulting in an increased potency of alcohol in seniors. Slower metabolism results in prolonged effects on the central nervous system and greater susceptibility to problem substance use.
- ▶ Prolonged substance use, intoxication or withdrawal can induce symptoms that may be misattributed to chronic conditions.
- ▶ Adjustment to new roles (retired, caregiver to parents or spouse) and losses (health, independence, death of family members) are risk factors for substance use problems.

2.2.1 The Aging Process

Many transitions occur as people age, but physical changes are the most readily apparent. The media has tended to portray aging in a negative manner, as evidenced by gray-haired people in denture adhesive and incontinence product commercials, and the absence of gray-haired individuals in what are stereotypically positive roles (Birk, 1996). However this is now changing somewhat, and for many seniors there are benefits to aging such as retirement, grown children, grandchildren, lifelong friends, and satisfaction with life's journey.

Later life can be a period of onset of certain chronic conditions (e.g., osteoporosis, type-2 diabetes). Certain physical and physiological changes are likely. Hair turns gray, bones and joints lose density, lean body mass gradually turns to body fat, and vision and hearing losses may occur. Physical abilities may gradually decline and medical problems tend to increase. High blood pressure, hormonal and gastrointestinal difficulties may surface for the first time (Baron & Carver, 1997; Gomberg & Zucker, 1998; Spencer & Hutchinson, 1999).

Cognitive changes can also occur and dementia is found in 10% of persons over the age of 70 (Woods, 1996). Some people may experience depression, anxiety, sleep disorders, or a sense of loss of control over their life as a reaction to the aging process and its demands. These changes are often attributed to aging when they may actually be caused by substance use problems (Gambert, 1997).

2.2.2 Symptoms of Chronic Conditions or Substance Use Problems

Prolonged substance use, intoxication, or withdrawal can induce symptoms that may be misattributed to chronic conditions (Dufour & Fuller, 1995). Some researchers speculate that a bias exists in the healthcare industry that predisposes physicians and others to attribute confusion and injury in the elderly to aging rather than to possible substance use problems (Gambert, 1997). Reasons for under-diagnosis and mis-diagnosis can relate both to stereotypical expectations of seniors' behaviour that precludes attributing problems to substance use, and to a reluctance on the part of seniors to be open about the problem. Birk (1996) asserts that excessive drinking carries a stigma, and seniors may be more reticent about discussing personal matters when they have been self-reliant in the past.

2.2.3 Age-related Changes and Substance Use

According to Smith (1995), seniors are more susceptible to the effects of alcohol due to physiological changes. These changes include:

- ◆ the percentage of body fat increases in proportion to total body weight;
- ◆ the amount of lean body mass decreases; and
- ◆ the total volume of water in the body diminishes.

Because alcohol is a water soluble compound and there is less water available to dilute its effects, alcohol will have more potency in seniors (Dufour & Fuller, 1995; Smith, 1995).

Lucey et al. (1999) altered the conditions surrounding alcohol intake in younger (21 to 40 years) and older (60 years and more) males and females. Participants were administered alcohol orally after fasting eight hours, orally after eating a meal and intravenously after eating a meal. Blood samples taken after each test condition revealed faster blood alcohol absorption in older participants in the oral-fasted condition and the intravenous-fed conditions, but not in the oral-fed condition. Another significant finding was that contrary to expectations, alcohol ingested orally on an empty stomach resulted in faster blood alcohol absorption than alcohol injected intravenously into a fed participant. The outcomes of this study support the notion that proper nutritional intake will mitigate the effects of alcohol and lack of food intake will intensify these effects in the senior.

Spencer and Hutchinson (1999) examined how alcohol intoxication increases production of stress hormones and how these hormones lead to premature aging. Although many people drink in order to relieve anxiety or stress,

elevated blood alcohol levels actually stimulate secretion of stress hormones called glucocorticoids. The continual stimulation of this class of stress hormones causes physiological and neurological degeneration associated with aging. This may be the cause of the premature aging that is sometimes observed in those with chronic alcohol problems.

Age-related physiological changes slow the metabolic (liver and kidney) activity that breaks down chemical substances, resulting in prolonged effects on the central nervous system and greater susceptibility to problem substance use (Solomon, Manepalli, Ireland & Mahon, 1993). One example of this is “drug dependency insomnia” which occurs when misuse of sleep medication creates a sleep disorder. Acute tolerance to sleep medication builds quickly, and in response, the person takes larger and larger quantities of the drug to combat the insomnia, so becomes dependent (Barnea & Teichman, 1994). As with all age groups, seniors are susceptible to this condition.

2.2.4 Losses and New Roles

Each individual will react to the challenges of aging in a unique manner depending upon their biological, emotional, mental and social strengths. New roles as caregivers for spouses or elderly parents, geographic relocation or the development of new relationships require adjustments and adaptations. Some of the challenges associated with loss include:

- ◆ the death of spouses, family or friends;
- ◆ retirement;
- ◆ changes in the family structure; and
- ◆ failing physical or mental health (Birk, 1996; Ruben, 1992).

According to a 1981 US National Council on Aging survey, “income, social interaction and activity levels are the variables that have the greatest impact on perceived quality of life following retirement” (Birk, 1996, p. 387). Upon retirement, spouses may need to adapt to being home together. While retirement is often expected to be a time of relaxation and release from stressors, it can constitute a significant source of stress because it demands adjustment to new roles (Norton, 1998).

According to Anetzberger & Korbin (1994), one major challenge for adults involves their role as caregivers for elderly parents. Due to a longer life span, some seniors will find themselves responsible for the care of elderly parents. The demands of being a caregiver after retirement adds to any existing stress (Anetzberger & Korbin, 1994; Birk, 1996).

Another potential stress occurs when geographic relocation is required due to personal health, family circumstances or economics. Such a move can mean a loss of the existing social support network and perception of the move as a positive or negative event will influence overall personal happiness. Approximately 75% of retired people prefer to stay in their own homes as long as they are able (Birk, 1996). If they do move, they may be confronted by the challenge of making new friends and building a new social structure.

Remarriage may also present a challenge to some individuals as they adapt to new partners and new social and family networks. While this change may be rewarding, it may also engender feelings of guilt or distress (Birk, 1996).

2.3 Patterns of Substance Use Problems in Seniors

Key Points

- Alcohol is the substance most commonly used by seniors.
- 22% drink four or more times per week.
- Signs of intoxication or prolonged use can be misattributed to aging, cognitive impairment or dementia.
- Early-onset drinkers comprise approximately two-thirds of older problem drinkers, and late-onset drinkers comprise one-third.
- Early-onset drinkers often have a history of treatment for alcohol use, and have less social support, while late-onset drinkers often develop problem use patterns as a reaction to loss or stress, and tend to have supportive social networks.
- Prescription drug use is more prevalent among those 65 and over than among younger cohorts.
- The prescription medications most commonly used are heart medication, blood pressure medication, pain relievers and benzodiazepines.
- Approximately 20% of seniors use over-the-counter pain relievers in addition to their prescribed pain relievers.
- Less than 1% of Canadian seniors report using illicit drugs.
- Men consume larger quantities of alcohol, but women may be at greater risk of becoming dependent on prescription medications.

2.3.1 Alcohol

a) Prevalence

Alcohol is the substance most commonly used by seniors (Health Canada, 1999a). According to a Health and Welfare Canada report (1992), 22% of those over the age of 65 drink four or more times a week (Baron & Carver, 1997). Some of the warning signs of excessive drinking in this age group include confusion, forgetfulness, anxiety, depression, sleep problems, injury from falls, decrease in the effectiveness of medications, conflict or withdrawal from family and friends, and improper eating habits accompanied by weight loss (Addiction Research Foundation, 1993a). As previously mentioned, these signs of intoxication or of prolonged use can be misattributed to aging.

Adams, Magruder-Habib, Trued and Broome (1992) studied the prevalence of alcohol abuse among elderly patients (65 and over) admitted to the emergency department of a North Carolina hospital over a two-month period. Based on reviews of medical records, interviews, and self-report data, they concluded that 14% of the patients treated currently had an alcohol use problem.

As well, Canadian researchers attempted to identify the number of older individuals (65 and over) treated in the emergency department of a hospital. They found that 14% of the study participants screened positive for alcohol abuse (Tabisz et al., 1991). This number (14%) seems high in comparison to the low rates found in the Epidemiological Catchment Area study (Regier et al., 1988). One of the reasons for the discrepancy in rates from one study to another relates to the sample group which is being studied. When researchers draw their sample from hospitals, clinics, and elder-specific programs, a selection bias exists that would not be found in the general population who is not seeking health services.

A study at the University Hospital Leiden in the Netherlands used the Munich Alcoholism test to screen patients 65 and over for possible alcohol problems. Of the 132 patients in the study, the researchers classified 9% as having an alcohol dependency problem (Speckens, Heeren & Rooijmans, 1991). Ganry, Dubreuil, Joly and Queval (2000) assessed 370 patients 65 years or older for alcohol problems. Based on a structured personal interview that questioned drinking patterns, past and present, the researchers concluded that 9% of the patients could be considered as having a problem with alcohol.

Ticehurst (1990) discusses differences in prevalence rates of alcohol abuse and dependence observed between countries. He cites studies that found from 0% to 20% prevalence rates, and notes that cultural

norms, religious considerations and socioeconomic factors determine the definition of problem drinking in different nations. Further, even within one country there can be large regional variations.

Another study noted Israeli cultural barriers to explorations of alcohol use by seniors. A search was conducted on 180 Israeli publications that focussed on alcohol research. Only five of these sources made any reference to aging. Weiss (1993) suggests that alcohol researchers are resistant to exploring alcoholism in the elderly, that those with an interest in the elderly are not interested in alcohol problems, and that alcohol abuse is not considered a problem of aging.

Alcohol consumption patterns tend to change as people age. McKim & Quinlan (1991) conducted a telephone survey in St. John's, Newfoundland and asked 3304 participants to answer questions regarding drinking behaviour patterns. They found a steady age-related decline in the quantity of alcohol consumed per drinking occasion but only a slight decline in the frequency of such occasions (McKim & Quinlan, 1991). Other researchers have also found that alcohol use declines with age for both men and women (Adams, Barry & Fleming, 1996; Barnea & Teichman, 1994).

Recently, revisions have been made in the recommendations about alcohol intake. Guidelines issued by the National Institute on Alcohol Abuse and Alcoholism recommend no more than one drink a day for both men and women over the age of 65 (Blow, Walton, Barry, Coyne, Mudd & Copeland, 2000). According to Adams et al. (1996), approximately 11% of men and 9% of women over age 75 exceed these recommendations. The effects of intoxication, such as confusion, unsteadiness and slurred speech, may be misinterpreted. Such behaviour may be attributed to dementia or cognitive impairment without consideration for the role of substance use problems (Allen & Landis, 1997).

b) Patterns

There is a consensus that there is not one specific type of drinker representative of this cohort (Allen & Landis, 1997; Fingerhood, 2000). Rather, there appear to be at least two broad categories of senior problem drinkers. "Early-onset" drinkers comprise roughly two-thirds of the group and "late-onset" drinkers make up the other third (Dufour & Fuller, 1995; Mellor et al., 1996).

The early-onset drinker usually has a lengthy history of alcohol-related problems that started before the age of 40 (Widner & Zeichner, 1991). Early-onset drinkers are more likely than late-onset drinkers to drink to intoxication, and to have a history of treatment

for alcohol use (Fingerhood, 2000). They generally have less family and social support and more difficulties with employment (previous or current). They are considered to be alcoholics who have aged (Widner & Zeichner, 1991).

The late-onset drinker is generally considered to have developed an alcohol problem after the age of 40, often as a reaction to the losses and life changes associated with aging (Graham, Zeidman, Flower, Saunders & White-Campbell, 1992; Schonfeld & Dupree, 1991). Compared to early-onset drinkers, late-onset drinkers tend to have fewer behaviour problems, a more supportive social network, better relationships with family members, less alcohol-related health problems, and can be more responsive to treatment (Widner & Zeichner, 1991).

In a study designed to investigate the antecedents of recent drinking in early- and late-onset drinkers, it was found that several similarities exist between the two groups. Participants in both groups were likely to have a drink to ease feelings of loss, loneliness and depression. This similarity emphasizes the likelihood that age and the inevitable transitions that accompany the aging process contribute to the drinking behaviour of some seniors (Schonfeld & Dupree, 1991).

Graham et al. (1992) remarked on problems inherent in the late-onset/early-onset dichotomy in that the cutoff age of 40 is rather young to begin experiencing reactions to the stresses of old age. They used 36 case studies and an intuitive approach to develop a profile of four different types of drinkers: chronic alcohol abusers, reactive drinkers, problem drinkers with psychiatric or cognitive problems and problem drinkers whose drinking was interrelated to an abusive, heavy drinking partner. Although the possibility exists for different types of older drinkers, this typology was not supported when the case studies and profiles were given to independent raters. Only the chronic and reactive drinkers were consistently identified, and their profiles are very similar to those of the early-onset and late-onset drinker, respectively.

A recent classification distinguishes between four types of older drinkers based on drinking history patterns and length. In addition to the early- and late-onset categories, there is a smaller group of "intermittent" drinkers who binge periodically but otherwise drink moderately or not at all. The fourth type is proposed to be a subset of late-onset drinkers who were heavy drinkers all their life but only became problem drinkers later, in response to two factors. First, the need for sobriety was reduced by the removal of family and work responsibilities, and second, the grief and loss associated with aging were experienced (Mellor et al., 1996). Most of the current literature

accepts the early- and late-onset profiles of the older drinker with increasing awareness of the intermittent or binge drinker (Baron & Carver, 1997; Fingerhood, 2000).

2.3.2 Prescription Drugs and Over-the-Counter Medication

a) Prevalence

Prescription drug use is more prevalent among those 65 and over than among younger people (Bergob 1994). The 1989 National Alcohol and Other Drugs Survey found that 18% of senior women and 14% of senior men used three or more prescription drugs in the month before the survey, whereas approximately 2% to 8% of younger adults used three or more prescription drugs in the month before the survey (Bergob, 1994).

Concern over the use and misuse of licit drugs has risen in recent years. Canadian seniors (65 and over) purchase 45% of all prescription drugs sold even though they comprise only about 12% of the population (Gander and District Continuing Care Program and the Seniors Resource Centre, 1994). According to recent surveys, 84% of seniors living in a private household, and 96% of seniors living in an institution had taken some form of prescribed medication during the two days prior to the surveys (Statistics Canada, 1997, 1999).

Bergob (1994) reported that the prescription medications that were most commonly used by seniors were heart or blood pressure medications (45% of women over 65, and 35% of men over 65), followed by pain relievers (33% of women over 65, and 30% of men over 65). Similar findings were reported in the 1994/95 National Population Health Survey, with pain relievers, blood pressure medications, diuretics, stomach remedies and laxatives being the most commonly taken medications by people aged 65 and over (Millar, 1998).

In one US study of patients receiving treatment for dependence on prescription drugs, drug dependence had developed at age 60 years or older in 35% of participants and the substances most commonly abused were benzodiazepines (Finlayson & Davis, 1994). The benzodiazepines are sedative-hypnotic drugs used to treat anxiety and sleep disorders. Seniors receive a relatively large amount of these prescriptions, despite clinical evidence that suggests caution due to side effects such as cognitive and psychomotor impairment (Closser, 1991). A Canadian study to promote safe medication use found that benzodiazepines were regularly used by 20% of older adults (aged 55 and over) in 22 Quebec communities (Paradis, 1990). Canadian researchers found that of seniors (65 and over) treated in the

emergency department of a large hospital, 17% screened positive for potential benzodiazepine or opiate abuse problems (Tabisz et al., 1991).

Benzodiazepine use was examined in a study by Closser (1991) who noted that even though use of these drugs in senior clients presented certain age-related health risks, many physicians still prescribed them. In addition to anxiety, this class of medications is commonly used to combat sleep disorders. However, one investigator found that benzodiazepine-dependent participants actually suffered from poorer sleep quality due to the repression of certain sleep stages (Schneider-Helmert, 1988).

Researchers at the University of Manitoba conducted a study on prescription drug use. Results showed that 19% of acute care admissions to the hospital were due to improper use of medication by persons aged 50 and over (Canadian Coalition on Medication Use and the Elderly, 1992). In the US, one research group maintains that 20% to 25% of all hospital admissions of seniors (55 and over) are due to adverse drug reactions (Washington State Substance Abuse Coalition, 1995).

Bergob (1994) found that over-the-counter drugs are also subject to misuse and pose potential health hazards through interaction with other drugs. Many people do not think to tell their doctor about the medications they buy at the drugstore (Atkinson, Ganzini, & Bernstein, 1992). Also, problems may arise if they are buying over-the-counter medication to treat an ailment that is already being addressed by a prescription drug. One study noted that 20% of women and 19% of men aged 65 and over used non-prescription pain relievers in addition to their prescribed medication (Bergob, 1994), increasing the possibility of substance use problems and adverse side effects from various drug interactions.

b) Patterns

Barnea and Teichman (1994) reported that three main patterns of medication misuse could be identified in seniors:

- ◆ use of medications contrary to instructions;
- ◆ use of multiple medications resulting in adverse drug interactions; and
- ◆ misuse due to misinformation or misunderstanding.

The first pattern of misuse mentioned is generally the one associated with substance abuse or dependence as a result of deliberate, excessive ingestion of medication. Seniors with a dependence on

prescription drugs may use denial, rationalization, defocussing and minimization when questioned about their medication usage (Solomon et al., 1993).

Denial: denying the existence of a problem or denying that the substance is addictive.

Rationalization: finding reasons to support the use of a substance (i.e., to calm nerves).

Defocussing: not focusing on the substance as the root of the problem.

Minimization: minimizing the impact or minimizing the amount consumed.

The second pattern of medication misuse is due to harmful drug interactions. Doctors need to be informed about all the medications a patient is taking. One report found that almost half of the persons over 55 years of age who received prescriptions from more than one doctor believed that the physicians communicated with each other about what drugs they prescribed for each individual (Canadian Coalition on Medication Use and the Elderly, 1992). This expectation can lead to problems. The possibility that medications may interact with each other rises in proportion to the number of medications used (Barnea & Teichman, 1994).

Many over-the-counter (OTC) drugs exert depressive effects on the central nervous system, and can have additive effects with other OTC drugs, prescription medication, or alcohol. Seniors or caregivers can reduce potential side effects from drug interactions by:

- ◆ informing the doctors about all medications currently being used, including over-the counter (OTC) drugs;
- ◆ always using the same pharmacy to fill the prescriptions; and
- ◆ being aware of the signs and symptoms of adverse drug effects, such as unsteadiness, drowsiness, confusion, dizziness, headaches, irritability and changes in heart rate (Addiction Research Foundation, 1993b).

The third pattern of medication misuse is due to misinformation or misunderstanding. Seniors may:

- ◆ forget to take their medicine;
- ◆ take a double dose to make up for missing it;
- ◆ take it at the wrong time;
- ◆ take an improper amount;
- ◆ misunderstand the instructions on the bottle;

- ◆ be unable to read the instructions on the bottle; and
- ◆ not get the prescription refilled either because they cannot afford it or because they do not think they need it as they feel fine (Ruben, 1992).

Schonfeld, Rohrer, Zima and Spiegel (1993) initiated a study of substance use problems in seniors because of concerns that they are a hidden population. The researchers interviewed service providers in Florida and North Carolina and asked them to estimate the percentage of their clients that they felt had alcohol or medication problems. There were two venues for service: either in-home care was provided, or the client was seen at an agency. Less than 2% of the admissions to alcohol treatment programs are seniors, even though estimates of alcohol abuse in this age group range from 2% to 15% or more (Schonfeld et al., 1993). The results of this study provided estimates for alcohol abuse that ranged from 1% (North Carolina, in-home) to 26% (Florida, agency), and estimates for medication abuse from 18% (North Carolina, agency) to 41% (Florida, agency). Both states registered a high level of concern over prescription drug use but reported that most of the medication problems were seen as misuse and mismanagement. Schonfeld et al. (1993) suggested that educating seniors about proper medication use and devising a medication management system tailored to their needs would help overcome this.

According to Ruben (1992), specific issues related to prescribing medications may be overlooked by medical professionals. Close attention needs to be given to the patient's prior medication history. Care needs to be taken to not prescribe too high or too low a dose, or too many drugs without adequate monitoring. Patients should be informed about possible side effects, especially if the effects are related to drug interactions. Seniors should also avoid the "gray market", which is when pills are borrowed or lent (Ruben, 1992).

2.3.3 Illicit Drugs

Less than 1% of Canadian seniors report using illegal drugs such as marijuana, cocaine and heroin (Statistics Canada, 2000). The Epidemiological Catchment Area data suggest a lifetime prevalence rate of 1.6% for illegal drug users over the age of 65 (Patterson & Jeste, 1999). Data from the Drug Abuse Warning Network in 1991 indicated that 1.8% of emergency room treatments for heroin or morphine abuse were for persons over the age of 55 (Patterson & Jeste, 1999).

In 1962, Winick proposed a “maturing out” theory that suggests that drug dependence is infrequently observed among seniors because they either grow out of their narcotic addictions due to adverse consequences or they die. To the extent that this theory has been accepted, research has declined. Some evidence for this theory has been found but it has also been acknowledged that enough senior addicts survive to warrant further investigation (Allen & Landis, 1997; Barnea & Teichman, 1994). Further, although mortality claims some older persons, medical advances are extending lifespans, and may counter the expected decreases in prevalence rates. As baby boomers grow to predominate the population of seniors, changes in prevalence of illicit drug use may occur (Barnea & Teichman, 1994).

2.4 Gender Differences

Certain gender differences are recognized in the substance use literature. Men consume larger quantities of alcohol and drink more often than women at all ages; by contrast, women may be at greater risk of becoming dependent on prescription drugs (Allen & Landis, 1997; Bristow & Clare, 1992; Liberto, Oslin & Ruskin, 1992; McKim & Quinlan, 1991). When researchers reviewed the medical records of 100 elderly patients admitted to an inpatient substance dependence program, they determined that female patients outnumbered male patients by a ratio of 7 to 3 for prescription drug dependence. Eighty percent of all patients were dependent on a sedative or hypnotic drug, and 83% of these drugs belonged to the category known as benzodiazepines (Finlayson & Davis, 1994).

Tamblyn et al. (1994) examined questionable high-risk prescribing practices in Quebec and found that senior women received more high risk prescriptions than men. More older women than older men were given questionable combinations of psychotropic drugs, given benzodiazepines for longer than 30 days, and were prescribed long-acting benzodiazepines that are contraindicated in the elderly.

Brennan, Kagay, Geppert and Moos (2000) examined the medical records of 22,768 elderly inpatients over a four-year period and found that 37% of the admissions who were diagnosed with a substance use disorder were women. Although there were more men than women with a substance use problem, more of the women received a concomitant psychiatric diagnosis (20% compared to 10% of the men). Compared to the men (8%), women (13%) were also more prone to accidents as a result of substance use problems. The elevated number of accidents among women may be caused by metabolic differences that increase the potency of alcohol on a woman’s system along with the tendency to use more psychoactive drugs than men (Bradley, Badrinath, Bush, Boyd-Wickizier, & Anawalt, 1998; Gomberg, 1995).

Millar (1998) noted that the 1994/95 National Population Health Survey found that in most age groups, a higher proportion of women reported taking medications. This pattern may be because women visit physicians more often than men.

Graham, Carver and Brett (1996) analysed the results obtained from the National Alcohol and Other Drugs Survey conducted by Statistics Canada in March 1989. Women aged 65 and over were most likely to be lifelong abstainers or former drinkers and least likely to be current drinkers. Where illicit drugs were concerned, only 1% of both men and women 65 years or older reported ever using marijuana. However, 20% of senior women and 14% of senior men reported using at least one psychoactive prescription drug (tranquillizers, sleeping pills, antidepressants, or narcotic analgesic) in the 30 days prior to the survey. The researchers suggested that stereotypes may play a role in dependence behaviour, particularly with the choice of substance involved. Senior women may consider drinking to be wrong but see no problem with reliance on a doctor's prescription. Men, on the other hand, may suffer equally as much from stress, anxiety or sleeping disorders but they are less likely to go to the doctor for such complaints and more likely to use alcohol.

2.5 Physical and Mental Health Issues

Key Points

- Health risks associated with heavy alcohol use include fractures from falls, liver disease, cardiovascular and gastrointestinal problems, and malnutrition.
- Seniors may require a slower pace to complete detoxification from alcohol.
- It is often difficult to determine whether a cognitive deficit observed in a senior is due to substance use problems, vitamin deficiency, medical problems or aging. If alcohol is instrumental in impairing cognitive functioning, some improvements can be expected following detoxification.
- Korsakoff's dementia is associated with alcoholism and is characterized by anterograde and retrograde amnesias.
- Those with alcohol use problems suffer from more psychiatric disorders than do the general population. Problems may include depression, anxiety, and suicidal ideation.

2.5.1 Health Problems Associated with Substance Use Problems

Heavy alcohol use in seniors is associated with increased health risks. Some of these risks result from lifelong alcohol abuse but even heavy drinking that begins late in life can also be associated with negative health consequences. The most common problem ascribed to heavy drinking is liver disease, but alcohol also contributes to rheumatism, arthritis, osteoporosis and other musculoskeletal conditions (Manisses Communications Group, 1995). Alcohol use may also interact with prescription or over-the-counter medications to decrease their effectiveness or produce adverse reactions.

a) Injury from Falls

Substance use problems can contribute to injury from falls. It can affect balance and judgment, and age-related changes in bone density and muscular strength predispose seniors to bone fractures (Rigler, 2000). In those who are alcohol dependent, up to 50% of hospital admissions may be due to injury from falls (Mulinga, 1999). One study that examined the relationship between hip fracture and chronic alcohol use problems found that hip fracture rates increased steadily with age. As well, 12% of hip fracture patients with alcohol use problems were discharged to a nursing home compared to only 5% of patients without alcohol use problems. Mortality rates were also significantly higher for hip fracture patients with chronic alcohol use problems (Yuan et al., 2001).

b) Liver Disease

Gambert (1997) described liver disease as probably the most well known and widely studied medical problem associated with excessive alcohol use. Liver problems include hepatitis, fatty liver and cirrhosis, all of which interfere with the vital metabolic processes necessary for good health. In one study, 50% of the elderly patients with cirrhosis died within a year of diagnosis (Smith, 1995). The problem of alcohol-related liver disease increases with age (Fingerhood, 2000). Management with diuretics that increase urine production produce more side effects in senior patients (Fingerhood, 2000; Gambert, 1997).

c) Heart Problems

It is difficult to specify the extent to which heavy drinking affects the heart, since heart attacks and heart disease are generally associated with age-related changes, especially in men. Alcohol abuse frequently increases blood pressure (Marmot et al., 1994). Alcohol may also cause a rise in systolic pressure that results in blood being shunted from the viscera to the body's periphery. At the same time, a senior may already be suffering from age-related changes that affect the

body's ability to maintain adequate body temperature. These two factors combined may put the senior drinker at risk of hypothermia and are particularly dangerous for those who live alone (Gambert, 1997). Cardiac arrhythmias, including atrial fibrillation, are seen in seniors with alcohol abuse (Fingerhood, 2000). Alcohol abuse also increases risks of cerebrovascular problems, including strokes and intracranial bleeding (Fingerhood, 2000). One study showed that men who were heavy drinkers had an increased risk of stroke (17%) as compared to moderate drinkers (8%) and abstainers (7%) (Colsher & Wallace, 1990). Alcohol consumption is also responsible for a temporary heart condition known as "holiday heart syndrome". This syndrome is characterized by an irregular heart rhythm that occurs following an alcohol binge. Such binges tend to happen during times of celebration and holiday and increase the chance of stroke and cardiac related deaths (Rigler, 2000).

d) Gastrointestinal Disorders

Gastrointestinal problems may result from prolonged alcohol intake and account for many of the visits senior chronic drinkers make to hospital emergency departments (Rigler, 2000). These problems may be instrumental in inducing vitamin deficiencies (Gambert, 1997). Gastrointestinal problems that result in nausea or vomiting may increase risks for electrolyte disturbances and dehydration (Gambert, 1997). One study found that 24% of heavy male drinkers had stomach or intestinal ulcers compared to 19% of moderate drinkers and 17% of abstainers (Colsher & Wallace, 1990).

e) Sexual Dysfunction

Gambert (1997) notes that the aging process itself is not a cause of impotence in senior males. Many men retain normal capabilities for sexual function well into their late adulthood. Senior male chronic drinkers, however, are prone to impotence because alcohol affects normal testosterone production. No research was found on senior women and sexual dysfunction.

f) Nutritional Deficiencies

According to Fingerhood (2000) and Gambert (1997), malnutrition and vitamin deficiencies are common in heavy drinkers. Sometimes the calories they consume through alcohol appease their hunger, other times they neglect to prepare a meal or are unaware that they should do so. Korsakoff's syndrome is often found in chronic alcoholics. It is caused by prolonged thiamine deficiency and is characterized by memory loss (Gambert, 1997). With poor nutrition, those with alcohol use problems may experience a suppression of the immune system and be at increased risk of infection. Especially in

older drinkers, doctors should also be aware of a possible reactivation of tuberculosis acquired during childhood exposure to the disease (Rigler, 2000). Also, vitamin deficiencies can lead to peripheral neuropathy, perceived as tingling then numbness in the extremities (Fingerhood, 2000).

g) Cancer

The risk for cancer increases with abuse of alcohol, including risks for breast cancer in women, prostate cancer in men, as well as cancer of the larynx, esophagus, and colon (Fingerhood, 2000).

h) Withdrawal Complications

Kraemer, Mayo-Smith & Calkins (1997) predicted that the older a person was, the more complications they might experience during a withdrawal episode. They compared a group of patients younger than 35 to a group of patients older than 49 who had been admitted to the same detoxification unit. Contrary to expectations, the groups did not differ in withdrawal severity or medical complications. Their lengths of stay were, however, affected by age, with older patients requiring longer stays. The researchers also noted greater cognitive and functional impairments in the older population, and suggested that regardless of whether these impairments were due to age or to alcohol withdrawal, senior people require more attention and care during the withdrawal phase. Another research group wanted to investigate the phenomenon of “kindling” which suggests that the more often an individual goes through a withdrawal episode, the more severe each successive episode will be (Brower, Mudd, Blow, Young & Hill, 1994). They conducted a retrospective chart review of younger (ages 21 to 35) and older (60 and over) patients who had received detoxification treatment at the same hospital and used a predetermined coding system to identify various withdrawal symptoms. Although no support for the kindling theory was found, results showed that the detoxification period was significantly longer for older adults. Contrary to Kraemar et al. (1997), this study did find that older adults suffered more withdrawal symptoms, however, different age groupings may account for some of the differences seen.

i) Increased Risk of Mortality

Banks, Pandiani, Schact and Gauvin (2000) examined mortality rates for 1853 white adult males from 18 to 79 years of age who had accessed alcohol treatment services in Vermont in 1991. In comparison with a large non-drinking group, it was established that mortality rates increased substantially with increasing age. Of those over 50 years of age, those in the treatment group were 1.5 times more likely to die than those in the general population.

2.5.2 Psychiatric Problems Associated with Substance Use Problems

a) Cognitive Deficits

There is a dilemma for health professionals in determining whether the etiology of a decline in cognitive abilities is due to substance use problems, related factors such as vitamin deficiencies, or due to the onset of chronic diseases or dementia (Allen & Landis, 1997). Overall, the general level of cognitive functioning remains intact in most who have alcohol use problems, although when specific abilities are tested, deficits are observed in memory, perceptual-motor skills, conceptual learning, and problem solving. Sometimes deficits ameliorate after detoxification, but deficits in abstraction and visuo-spatial abilities often persist (see Allen & Landis, 1997 for a review; Liberto et al., 1992).

b) Dementia

Woods (1996) reports that 5% of people over the age of 65 and 20% of people over the age of 80 will show some form of dementia. It is difficult to determine how much of a person's cognitive decline is due to aging, medical problems, or substance use problems. Carlen et al. (1994) studied 130 cognitively impaired individuals (age 50 and over) living in long-term care facilities. Case histories, medical records and standardized testing were used to determine the type of dementia involved. There were four main categories of dementia established: 1) dementia of the Alzheimer's type (35%), 2) vascular dementia (19%), 3) alcohol-related dementia (24%), and 4) dementias due to miscellaneous causes (22%). Patients with alcohol-related dementia were, on average, 10 years younger than those diagnosed with other dementias. One of the criteria used to establish alcohol-related dementia was stable cognitive performance (i.e., no decline) for the year following admittance to the facility. For some with alcohol use problems, cognitive performance may improve after admission to a residential facility if alcohol intake is controlled. It was also found that for the 75% of patients who received a diagnosis of alcohol-related dementia, this diagnosis was absent in their medical records, suggesting that symptoms are often mis-diagnosed. Some researchers question whether alcohol-related dementia exists apart from the cognitive changes that result from nutritional deficiencies (Liberto et al., 1992).

Korsakoff's dementia (sometimes called Wernicke-Korsakoff's syndrome) is the dementia most commonly associated with alcoholism (Allen & Landis, 1997). It is due to a prolonged thiamin deficiency and has a characteristic pattern of both anterograde amnesia (an inability to form new memories) and retrograde amnesia (an inability to retrieve long-term memories). Wernicke-Korsakoff's dementia has a faster onset compared to alcohol-related dementia. Those with alcohol-related dementia may experience a broad range of cognitive dysfunction, often encompassing visuo-spatial and problem-solving as well as memory problems (Allen & Landis, 1997).

The connection between Alzheimer's and alcohol use problems has only recently been studied. Alzheimer's disease and alcohol abuse or alcohol-related dementia can be co-morbid. One study examined the drinking behaviour of 64 patients who had received a diagnosis of probable Alzheimer's disease, 31% of whom had a current or a past history of alcohol abuse. Those with a long history of alcohol abuse presented a clear example of Alzheimer's disease with co-morbid substance abuse. For those who had a short history of alcohol abuse (late-onset), however, researchers suggested that the alcohol abuse may have been a manifestation of disinhibition brought on by the Alzheimer's (Larkin & Seltzer, 1994).

c) Psychiatric Conditions

Research has shown that seniors with alcohol use problems suffer from more psychiatric disorders than does the general population (Liberto et al., 1992). According to the Epidemiological Catchment Area study, people diagnosed with an alcohol abuse or dependence disorder were 2.9 times more likely to be diagnosed with another mental disorder at some time during their life span (Regier et al., 1988). A review of the records of 3986 US Veterans Affairs patients (aged 60 to 69) with alcohol dependence revealed the following rates of concomitant disorders: affective (includes depression) (21%), anxiety (10%), schizophrenia (9%) and personality disorders (6%) (Blow et al., 1992). The preceding statistics may not be comparable to the Canadian context in light of the age grouping and the health conditions in Canada.

Depression is by far the most common disorder co-morbid with substance abuse, but it is difficult to determine the nature of the relationship between the two (Krause, 1995; Segal, VanHesselt, Hersen & King, 1996). Are people depressed because they drink or do they drink because they are depressed? One useful categorization emphasizes the timing of the depression. If the depression begins

before a drinking episode or during a period of abstinence, then it is considered “primary” depression. Secondary depression refers to depression that develops as a consequence of drinking (Oslin, 2000a).

One study used the 30-item Geriatric Depression Scale (GDS) to screen a sample of seniors (age 62 and over) presenting to a geriatric outpatient clinic for general care. On this scale, a score of greater than 10 indicates depression. Results showed that 70% of the participants who scored in the depressed range on the GDS had not previously been diagnosed as depressed. Furthermore, 19% of the patients classified as depressed were on anti-anxiety medication, indicating that either depression co-exists with anxiety, or that the depression was misdiagnosed in the elderly (Fulop et al., 1993).

Anxiety disorders are common to seniors, but they are not always recognized or treated. Anxiety is often an early symptom in cardiovascular, endocrinological, and neurological disorders (Bortz & O’Brien, 1997). Anxiety symptoms themselves can lead to medical complications, for example, cardiac arrhythmia or insomnia (Sheikh, 1994). The current emphasis on pharmacological treatment is not always appropriate for seniors who may confuse the dosage or instructions or discontinue use because they do not feel any improvement. On the other hand, they may take too much of the medication to achieve an effect and this creates a substance dependency (Bortz & O’Brien, 1997).

Older people in general have high suicide rates compared to other age groups (Health Canada, 1999b; Woods, 1996). Seniors who suffer from alcoholism and depression are at increased risk of suicide (Fulop et al., 1993). Since problem alcohol use and depression are implicated in suicide, and given the high rate of suicide in older adults, substance use treatment providers as well as other health care professionals need to be sensitive to the presence of suicidal ideation in older clients (Holroyd & Duryee, 1997).

2.6 Risk Factors

Key Points

- Seniors have easier access to prescription medications due to more prescriptions written and more frequent contact with health care providers.
- Alcohol may have more potency in seniors due to a slower metabolism.
- Seniors may self-medicate pain and insomnia with alcohol, prescription and over-the-counter medications and/or other drugs.
- Losses (of family members, and in social networks) and a positive family history of alcohol abuse are risk factors for problems with substance use.
- Family and professionals may exhibit attitudes or behaviours that enable substance use problems to continue.

2.6.1 Practical Factors

According to Barnea & Teichman (1994), practical factors for substance dependence take into account things such as:

- ◆ how ill a person is;
- ◆ how many medications they are taking;
- ◆ how much they know about the medicines and their side effects;
- ◆ how many doctors are treating them; and
- ◆ how many pharmacists are filling their prescriptions.

The more health problems people have, the greater the number of medications they use. The more medications they use, the greater the odds that substance misuse or dependence could develop, especially if different doctors are prescribing the same medication (Barnea & Teichman, 1994). Tamblyn and Perrault (1998) examined the prescribing practices of medical professionals to seniors. Some evidence of inappropriate prescribing practices was associated with medical professionals who lacked areas of specialty, and the authors encouraged consultation with peers, especially if the professionals were operating in geographically isolated areas.

Another practical factor is the distance travelling to and from the clinic. This can impact on regular check-ups and make it harder for the doctor to detect problems. Distance from the pharmacy and the number of pharmacies in the area is another risk factor, if it allows easier access to medication (Barnea & Teichman, 1994).

2.6.2 Biological Factors

Seniors have less body water to dilute the alcohol they consume, so smaller amounts of alcohol are needed to induce intoxication (Allen & Landis, 1997). Age-related changes in body metabolism increase the sensitivity of the central nervous system to both alcohol and drugs, causing prolonged effects. The enhanced effect of psychoactive drugs (such as the benzodiazepines) and the ease with which seniors can generally access them through their physician, may create a vulnerability to medication problems (Allen & Landis, 1997).

With increasing age comes the increasing potential of pain or insomnia as a result of health problems. Chronic pain is responsible for the purchase of a great deal of OTC medication, especially painkillers (Adams, Zhong, Barboriak & Rimm, 1993; Atkinson & Ganzini, 1994). With the variety of psychoactive substances available (alcohol, prescription, OTC, and other drugs) and with the increased potency of drugs in the senior, risks increase for substance use problems (Gomberg & Zucker, 1998).

Graham, Clarke et al. (1996) interviewed 826 adults aged 65 and over to evaluate the relationship between alcohol use and other medications that depress the central nervous system (e.g., codeine). They included a checklist of four social reasons for drinking and 11 personal effect reasons (i.e., to pass the time, forget worries, etc.) They discovered that people who were already using depressant medication were also significantly more likely to endorse the use of alcohol for the following reasons: to relax, to relieve tension/anxiety, to forget worries and to relieve pain. Similar results were obtained when they examined the use of tranquillizers and sleeping pills as they related to alcohol use. The researchers concluded that seniors were using both alcohol and medication to treat psychological symptoms and such behaviour places them at risk for substance misuse, abuse and dependence.

2.6.3 Psychosocial factors

a) Retirement

Norton (1998) reported that a person's occupation can exert a strong influence on their self-definition. Some people, often women, focussed their energy on running a house and raising a family. For many people, their employment outside the home provided them with a certain status and self-esteem as well as a way to structure their time.

Once retirement occurs, individuals may be challenged to find new interests and activities. Difficulty during this adjustment period may place seniors at risk of substance use problems.

b) Bereavement and Other Losses

Bereavement, especially of one's spouse, is a critical process for people (King et al., 1994). Divorce and separations may be precipitants of alcohol use problems for some (Dufour & Fuller, 1995). Other losses may include "... standard of living and social status if retirement income is less than pre-retirement income, empty nest syndrome, loss of health, loss of cognitive functions, loss of motor abilities and functions, loss of vigour, loss of sexual drive and/or performance, loss of meaning of life, loss of interest in things previously valued..." (Norton, 1998, p. 377). A string of losses is considered a precipitant of depression in seniors and may initiate use of psychoactive substances to counteract the depression. As well, losses in later life may raise the individual's awareness of their own mortality and can sometimes prompt reminiscence as the individual begins to review their life so far (Boggs & Leptak, 1991) and alcohol or other substances may be used or increased to lessen troublesome negative cognitions.

c) Losses in the Social Network

According to Hanson (1994), changes in a person's social network are inevitable as one ages. The senior may lose friends and neighbours by moving to a new location or family and friends may move away. Contacts with co-workers may be lost after retirement and physical health problems may prevent participation in previously enjoyed activities or social groups. Hanson (1994) examined the relationship between social networks and heavy drinking in a random sample of 500 men who were all 68 years old at the time of the study. Results showed that heavy drinkers were more likely to live alone, had fewer contacts with friends and family, less participation in social events and a less integrated social network.

d) Enabling Attitudes and Behaviours

Enabling refers to attitudes and behaviours in people that allow substance use problems to develop unimpeded and may interfere with recommended treatment. Sometimes family members want to protect themselves from embarrassment and other times they want to protect the substance abusing senior. They might believe that seniors should be allowed to do as they please because they have less time left in which to enjoy their life (Baron & Carver, 1997; Segal et al., 1996).

e) Chronic Stress

Welte and Mirand (1995) conducted a telephone survey with 2325 randomly selected inhabitants aged 60 or more in Erie County, New York, and questioned them about drinking behaviour, stressful life events, chronic stresses, social support, medical and physical problems and coping styles. Contrary to expectations, no relationship was found between stress, heavy drinking and an individual's style of coping with life stressors. What they did find, however, was that a history of chronic stress was a strong predictor of alcohol problems. From this perspective, the use of alcohol may be regarded as a means of coping.

According to Anetzberger and Korbin (1994), the dynamics of the relationship between the perpetrator and the abused in elder abuse are extremely complicated and may involve a history of family violence, alcohol abuse or conflict. Some seniors may be required to look after aging parents or other family members. As a result, some seniors may use alcohol or medications as a means of dealing with the stress related to their present situation. In addition, substance use problems may also be evident among seniors who live in or have experienced abusive situations. (Anetzberger & Korbin, 1994).

f) Family and Personal History

Late-onset drinkers differ from early-onset drinkers with respect to family and personal histories of drinking. Those with early-onset or chronic alcohol use problems are more likely than those with late-onset alcohol use problems to have had family members who abused alcohol, with the emotional and social trauma that accompanies such behaviour (Goldstein, Pataki & Webb, 1996). They also have a personal history of heavy drinking that will influence the use of alcohol in older adulthood. Gurnack and Hoffman (1992) examined the influences of emotional distress on drinking behaviour in males and concluded that even though heavy drinking in seniors may be perceived as a consequence of these stressors, it is more likely a continuation of lifelong patterns.

g) Education and Income

Ganry et al. (2000) found that higher educational levels and family incomes consistently increased the frequency of alcohol use. Higher income allows seniors the option of moving to a retirement community where more social drinking may occur. Having the financial resources and unlimited time in which to drink are potential risk factors (Norton, 1998).

2.6.4 Protective Factors

In addition to the noted risk factors, both researchers and treatment experts have acknowledged the importance of protective factors. For those seniors who seem resilient to risks, there are certain protective factors that give them the needed strength to overcome potential risks. Protective factors may be viewed as the reciprocal of risk factors. Sometimes the same factor can operate as a risk factor and a protective factor, for example, caring for an elderly spouse is stressful and therefore a risk factor, but if it gives the carer a role at a time of potential role loss, it can also be a protective factor.

2.7 Screening and Diagnosis

Key Points

- ▶ Under-diagnosis of alcohol use problems and medication misuse can be addressed by training and education of health professionals, family members and seniors.
- ▶ Screening tools for alcohol include the CAGE (mnemonic aid; see 2.7.2a), Michigan Alcohol Screening Test-Geriatric Version (MAST-G) and Alcohol Use Disorders Identification Test (AUDIT). The MAST-G is specific to seniors but requires more time than the CAGE. These instruments are limited by their reliance on self-reports.
- ▶ Questions to screen for problem use of substances other than alcohol should focus on extent and intent of use.
- ▶ Additional care is required when applying DSM-IV diagnostic criteria to seniors. Seniors can experience significant problems with even low amounts of alcohol intake. Tolerance and withdrawal need not be present for there to be a problem.

2.7.1 Screening

Various factors combine to create a situation whereby seniors with substance use problems are not identified. These factors can be countered by training and education of health professionals, family members and the seniors (Baron & Carver, 1997). Coogle, Osgood and Parham (2000) devised a system to increase knowledge among service providers throughout the state of Virginia. A core group of volunteers attended a full-day training session that educated them about alcohol use problems in seniors and taught them how to present this information to other service providers. Personal knowledge was tested both before and after the training sessions for all groups and significant

knowledge gains were recorded for all groups. The researchers noted that an indirect benefit of the workshop sessions across the state was that 79% of key agency personnel believed that service delivery had improved due to increased agency networking, referral and coordination.

It is also necessary to educate family members and the seniors themselves about alcohol use problems. Service providers who deal directly with senior clients and their families are an effective means of dispersing information. Service providers who had received training on substance use problems stated that they had shared their knowledge with clients, families, senior's groups and the general community (Coogle, Osgood, Pyles & Wood, 1995).

Recent years have also seen increased concern over the potential misuse of prescribed medication. In addition to the need to educate health professionals, service providers and family members, there have also been efforts to deal with the problem at its source by educating the senior. The Canadian Coalition on Medication Use and the Elderly (1992) created a public media campaign to raise awareness of the potential for health problems due to improper use of prescription and over-the-counter medication. Other Canadian efforts include the "Seniors and Their Medicines" project initiated by Dalhousie University to assess medication use, develop educational programs and information sessions, and the "Medication Awareness Project" aimed at educating seniors in the community of Ottawa-Carleton on judicious use of medication (Seniors in Action, 1992).

2.7.2 Screening Tools

a) Alcohol

The need for a quick, reliable instrument that can detect alcohol use problems led to the development of the CAGE questionnaire by Ewing in 1984. It was validated on a younger population in primary care settings and is the most widely used screening tool available (Adams et al., 1996; Allen & Landis, 1997; King et al., 1994). The CAGE is time efficient and easily administered because it only has four questions (Fingerhood, 2000). Usually, two positive responses indicate a problem.

- C** Have you ever felt that you ought to **C**ut down on your drinking?
- A** Have people **A**nnoyed you by criticizing your drinking?
- G** Have you ever felt bad or **G**uilty about your drinking?
- E** Have you ever had a drink first thing in the morning (**E**ye opener) to steady your nerves or get rid of a hangover?

In order to assess the validity of the CAGE when applied to seniors, one study conducted personal interviews with 323 patients aged 60 and over who sought treatment at the Medical College of Virginia's Ambulatory Medicine clinic. Using DSM-III criteria, the researchers determined that 33% of the patients had a history of drinking problems. In comparison with results from the CAGE questionnaire that had also been administered, the researchers found the CAGE to be quite accurate in distinguishing problem from non-problem drinkers and recommended its use for senior patients (Buchsbaum et al., 1992). Some of the advantages they cited to support use of the CAGE were its brevity, ease of use and inoffensive questions.

Other researchers raised concern that the CAGE alone is not sufficient to detect alcohol problems in seniors. Adams et al. (1996) had 5065 patients (60 and over) fill out a self report questionnaire related to alcohol use, smoking, diet and exercise. The CAGE was also administered. While the CAGE identified 9% of men and 3% of women with alcohol use problems, it largely failed to detect "heavy" or "binge" drinkers according to the study criteria. The researchers emphasized that the self-report nature of the CAGE requires honest responses to the questions. To the extent that seniors are reluctant to disclose such information, the CAGE may be rendered less useful for this age group. They suggested that better results might be achieved by embedding the CAGE questions amidst other questions about alcohol use. This recommendation to embed the questions was also suggested by Fingerhood (2000).

There are several other screening tools available that elicit information about drinking behaviour. Two that are commonly used are the 24-item Michigan Alcohol Screening Test – Geriatric Version (MAST-G) and the 10-item Alcohol Use Disorders Identification Test (AUDIT). Both of these tests have been validated and are fairly reliable predictors of alcohol problems, but they are lengthier than the CAGE and require more time to administer. For that reason, the CAGE is still felt to be the best screening tool for seniors (Fingerhood, 2000) although it has been suggested that for seniors, the CAGE's sensitivity could be increased by lowering the cutoff score to one positive response (Adams et al., 1996).

When using self-report instruments such as the CAGE, MAST-G, and AUDIT, one must consider the willingness of patients to be open and honest about their behaviour. Shame, guilt, denial and a belief that they should be able to handle their own problems may prevent seniors from speaking frankly (Blow & Barry, 2000; Dufour & Fuller, 1995).

Moderate drinking

One factor that may complicate the issue of accurate detection of alcohol use problems is evidence that drinking moderate amounts of alcohol could be beneficial to one's health. Benefits to the cardiovascular system (Klatsky et al., 1990), and in reducing risks of dementia and cancer have been suggested (Broe et al., 1998; Orgogozo, et al., 1997). Oslin (2000a) is careful to point out that the benefits of moderate drinking may be restricted to those who have a positive history with alcohol use, and drinking should not be advocated in those who are abstainers.

Graham & Schmidt (1999) used information from interviews with 826 persons aged 65 and over to assess the relationship between psychosocial well-being and alcohol use. They found no specific overall effect to indicate the nature of the relationship between the two variables, and suggested that the positive benefits experienced by some were probably counteracted by the negative experiences of others.

One study that did show support for moderate drinking was designed to assess the health functioning of seniors in relation to alcohol consumption. A total of 8578 adults aged 55-97 were interviewed during visits to a primary care clinic. Respondents were categorized as abstainers, low-risk drinkers and at-risk drinkers (more than nine drinks a week for women and 12 drinks a week for men). The results showed that low-risk drinkers scored significantly better on all scales of physical, mental, emotional and social health functioning than did either the abstainers or the at-risk drinkers (Blow et al., 2000). Moderate drinking may be beneficial to general health and well being, however, care must be taken with this information, as public and personal perceptions of what constitutes moderate drinking will differ.

b) Other Substances

Screening tools for abuse and dependence on substances other than alcohol are discussed less frequently. Tabisz et al. (1991) developed the Manitoba Drug Dependency Screen (MDDS). This instrument screens for the drugs used, the quantity and frequency of use, the perceived intent of the drug, and whether it was prescription or not.

Baron and Carver (1997) suggest possible questions that may be asked to screen for medication misuse or abuse. Their questions focus on adherence to prescription instructions, multiple prescription drug use, sharing of prescription medications, eliciting the same prescription from multiple physicians or psychiatrists, use of OTC medications, and concurrent alcohol use.

2.7.3 Diagnostic Criteria

Problems with alcohol and drug use are identified by various means, including reviews of case histories, clinical interviews, and meeting established criteria. The criteria laid out in the Diagnostic Statistical Manual (DSM) of the American Psychiatric Association provide a detailed description of the conditions and behaviours that constitute a diagnosis of substance abuse or dependence. Several researchers have commented that the DSM-IV criteria are appropriate for young and middle-aged adults, but are less appropriate for older adults (Allen & Landis, 1997; Fingerhood, 2000). Fingerhood (2000, p. 987) suggested an alteration of the criteria as illustrated in Table 1.

Table 1: Applying DSM-IV Diagnostic Criteria to Older Adults

Criteria	Special Considerations for Older Adults
Tolerance	May have problems with even low intake due to increased sensitivity to alcohol.
Withdrawal	Many late-onset alcoholics do not develop physiological dependence.
Taking larger amounts or over a longer period than was intended.	Increased cognitive impairment can interfere with self-monitoring.
Unsuccessful efforts to cut down or control use.	No change.
Spending much time to obtain and use alcohol and to recover from effects.	Negative effects can occur with relatively low use.
Giving up activities due to use.	May have fewer activities, making detection of problems more difficult.
Continuing use despite physical or psychological problems caused by use.	May not know or understand that problems are related to use, even after medical advice.

In general, the criteria for “abuse” specify that the pattern of use must lead to impairment or distress in occupational or social functioning, or be used in physically hazardous situations, or result in legal problems. Applying these criteria to seniors is problematic, as they may be without an occupation and have few social contacts (Atkinson, 1990; Miller, Belkin & Gold, 1991). Some seniors may no longer drive and so are less likely to encounter legal problems associated with driving while intoxicated (Fingerhood, 2000; King et al, 1994). Similarly, the criteria for “dependence” focus on tolerance (requirements of larger amounts to induce the same effect), on withdrawal, on taking larger amounts than intended, and on continued use despite knowledge of a persistent problem caused by the substance (American Psychiatric Association, 1994). Researchers point out that seniors can experience significant problems with even low amounts of alcohol intake, and that tolerance and withdrawal

need not be present for there to be a problem (Fingerhood, 2000). Indeed, tolerance for substances is often decreased in older persons because of physiological differences in metabolism, so smaller quantities may lead to equivalent intoxication (Allen & Landis, 1997). Further, substance use in the elderly is more likely to result in medical or psychiatric complications, but if these complications are not recognized by the senior as being due to the substance used, they do not constitute criteria for dependence (Fingerhood, 2000). In summary, additional care, and some leniency may be advisable in applying DSM-IV diagnostic criteria to seniors.

2.8 Treatment Issues

Key Points

- ▶ Seniors, families and caregivers need to be aware of the signs of substance use problems. If problems are suspected, behaviours of daily living should be noted.
- ▶ The quantity and frequency of prescription and over-the-counter medication use should be monitored.
- ▶ Professionals who have contact with seniors should be educated to better recognize problems with substance use.
- ▶ Age-specific treatment programs are indicated, and may need to be less confrontational or move at a slower pace than mainstream programs. Such programs must take into account any physical limitations, seniors' unique stressors and social supports.

2.8.1 Education and Awareness

Zimberg (1996, p.46) suggests that the following checklist be administered to both patient and family when alcohol use problems are suspected.

Does the patient exhibit any of the following?

- ◆ marked change in behaviour or personality;
- ◆ recurring episode of memory loss and confusion;
- ◆ social isolation or staying home most of the time;
- ◆ argumentative behaviour and resistance to help;

- ◆ lack of personal hygiene, skipped meals, or missed appointments;
- ◆ failure to take prescribed medicine(s);
- ◆ inability to manage income effectively;
- ◆ trouble with the law; and
- ◆ repeated falls or accidents.

Seniors, families and caregivers also need to be made aware of the signs of other substance use problems. In addition to the questions above, the quantity and frequency of prescription and over-the-counter medication use should be monitored. The results from a survey conducted by a Seniors Resource Centre showed that the majority of seniors were not using any type of medication management system (Gander and District Continuing Care Program, 1994). Recent media campaigns have attempted to educate seniors about the dangers associated with the misuse of prescription and over-the-counter medication (Canadian Coalition on Medication Use and the Elderly, 1992). As well, several educational programs, workshops and pamphlets have been developed to raise awareness of the issues surrounding seniors and substance use problems (Seniors in Action, 1992; Washington State Substance Abuse Coalition, 1995).

Substance abuse counsellors, physicians, social workers, mental health counsellors and nurses may not have enough information about substance use issues. One report on special concerns for counselling professionals emphasized the need for counsellors to stay abreast of the issues surrounding substance use problems in seniors (Stoddard & Thompson, 1996). Some organizations offer workshops and courses on substance use problems designed to meet the needs of various professional groups (Addictions Foundation of Manitoba, 1995). Other educational initiatives have encouraged pharmacists and physicians to give increased attention to the ongoing use of medications by their patients and clients (Canada's Research-Based Pharmaceutical Companies, 2000).

Substance use problems among seniors in the workforce has also received attention. Employers need to be aware that such problems exist and provide workshops and information sessions in the workplace to educate their employees. Such workshops may include discussions of retirement as a potentially stressful transition period. Recourse to treatment services should also be discussed. Workers who already have a substance use problem may be able to access services through an Employee Assistance Program, usually with protection against job loss and/or negative repercussions (Goldmeier, 1994).

2.8.2 Age-specific Interventions

Recent years have seen a debate among researchers as to whether seniors with substance use problems would benefit from treatment tailored to the needs of their age group. In the 1980s, the research question was whether groups of seniors fared as well as groups of younger adults in mainstream programs, and if they did fare as well, the treatments were deemed effective (Segal et al., 1996; Widner & Zeichner, 1991). The 1990s saw a shift in the research question, asking now whether age-specific interventions yield better outcomes than mainstream interventions. The question of what constitutes a successful outcome further complicates this research. In some studies, abstinence is adopted as a measure (e.g., Kashner, Rodell, Ogden, Guggenheim & Karson, 1992), in other studies, successful remission included nonproblematic substance use (e.g., Schutte, Byrne, Brennan & Moos, 2001).

Differences within an age group are sometimes larger than differences between age groups. One study examined demographic and descriptive differences between younger and older participants who had been charged with driving while intoxicated. They found only small differences between age groups, but found prominent differences between the older early-onset and older late-onset participants, with late-onset drinkers exhibiting less consumption on an average day, and early-onset drinkers tending to drink more frequently. The researchers suggested that it may be unwise to treat older clients as a homogeneous group (Mulford & Fitzgerald, 1992).

Schutte et al. (2001) conducted a 10-year longitudinal study of senior problem drinkers to determine demographic and descriptive characteristics associated with successful recovery and abstinence. They compared three groups of participants from the original study sample: 140 who had achieved successful remission, 184 whose alcohol problems had not improved and 339 lifetime non-problem drinkers. They found that long term remission was most likely for those who drank smaller quantities, drank less frequently and experienced less severe alcohol-related problems. As well, higher levels of marital conflict were predictive of greater remission, possibly because the conflict motivated drinkers to change their behaviour.

Kashner et al. (1992) compared the response of seniors to a standard, confrontational treatment approach, and to an age-specific rehabilitation program. While the traditional approach focussed on overcoming denial and resistance, the age-specific program emphasized building self-esteem, developing peer relationships and setting short-term goals. Although participants in both approaches showed improvement, those in the age-specific program showed higher abstinence at six-month and 12-month follow-up.

Treatment must take into account certain factors associated with age. Seniors are at times more reluctant to seek treatment due to personal and societal views of substance dependence as a moral weakness. Treatments that use a confrontational approach often depend on the patient accepting the label “alcoholic”, and run the risk of shaming and stigmatising the senior. They feel more at ease with people of their own generation because they have experienced the same historical and social context. As well, seniors may need more time to tell their story especially if they are not accustomed to discussing sensitive, personal issues with other people (Segal et al., 1996).

Zimberg (1996) highlighted three steps to an age-specific approach for treatment for seniors:

- ◆ the stresses associated with aging must be identified and dealt with;
- ◆ an accurate diagnosis must be made in order to rule out the existence of other factors that could affect treatment outcome. For example, depression and alcohol dependence often co-exist and the depression must be treated with an integrated treatment plan with the substance use problem; and
- ◆ seniors should be encouraged to find activities and interests and create a new social support structure. Family members and other caregivers should be involved and age-specific support groups and treatment programs should be used.

2.8.3 Tailoring Treatment

Each individual presents unique challenges to the design and implementation of effective service delivery. Substance use problems may not be the primary problem, or in some cases, may have created more severe problems that must be addressed first. Medical or other physical conditions and impairments are examples of conditions that may result from prolonged substance use, but nonetheless require attention if later substance abuse treatment is to succeed (Todtman & Todtman, 1997). Persons with vision or hearing problems may not benefit from group sessions that do not allow for these handicaps. Persons who are physically unable to transport themselves to treatment centres may require in-home visits. Sometimes clients are in poor physical health and suffering nutritional deficits and initial treatment may need to focus on methods for improving general physical well being (Segal et al., 1996).

Treatment for substance abuse will be more effective if it is tailored to accommodate any cognitive limitations. Cognitive ability must be assessed to determine if the client will be able to benefit from therapy. Alterations to the proposed treatment, such as more individual counselling and a focus on reducing stress, may be necessary to accommodate reduced cognitive functioning (Segal et al., 1996).

Treatments should also be mindful of an individual's sociocultural environment. Views on substance use problems will differ depending on an individual's age cohort, their culture and their religion, and accommodations to these differences should be considered before a treatment regimen is prescribed (Mellor et al., 1996).

2.8.4 Case Management

Case management entails a team approach that involves all parties concerned with service delivery, fostering co-operation and communication between different substance abuse services, public health agencies and government departments. The linking of services can enhance education across agencies and the sharing of resources. Although establishing such links is time consuming and complex, all parties benefit (Mellor et al., 1996). To be effective, the links and partnerships that are forged must be unique to each community, determined by its needs and reflecting its resources.

2.8.5 Psychiatric Co-Morbidity

It is generally acknowledged that depression is the most common psychiatric disorder and this is true for seniors, where 10% over the age of 65 are affected (Segal et al., 1996). Other co-morbid disorders also occur in this age group, including bipolar disorder, schizophrenia, anxiety disorders and personality disorders (Speer, O'Sullivan & Schonfeld, 1991). All of these problems require treatment that will differ from treatment focussed solely on substance dependence. Professionals and clients must be aware that they cannot expect positive results if they only address one facet of the problem (Segal et al., 1996). Detection of psychiatric disorders apart from the substance use will increase the likelihood of successful treatment and recovery.

2.9 Treatment Approaches

Key Points

- A variety of treatment approaches are used for seniors with substance use problems. These approaches are not mutually exclusive and can be found in any combination.
- Peer-led self help groups help build social relationships that are not based on substance use. Alcoholics Anonymous, Narcotics Anonymous, Rational Recovery, and Secular Organizations for Sobriety are examples.
- Brief interventions that are designed to increase motivation to change are advised for seniors experiencing mild to moderate substance use problems. Brief interventions can be used by a variety of professionals.
- Cognitive-behavioural treatment approaches address the thoughts and beliefs that underlie substance use problems.
- Psychosocial treatment approaches attempt to build self-efficacy and social networks before targeting problems with substance use.
- Outreach services provide treatment in the senior's home, and overcome barriers inherent in requiring the senior to travel to receive services.
- Harm reduction approaches focus on reducing the harms that result from substance use, rather than targeting the substance use itself, unless it is identified by the senior as the problem.
- Pharmacological interventions that have been effective in reducing substance use in middle-aged adults have not yet been adequately tested on the senior population.

2.9.1 Peer-Led Self Help Groups

Peer-led self help groups do not require a professional to be present at group meetings. Group therapy is based on the idea that recovery is aided by peer identification and by learning from the experiences of others. Groups can foster a sense of optimism and foster social relationships that are not based on substance use.

Many peer-led self help groups are based on the Twelve-step approach such as Alcoholics Anonymous (AA) and Narcotics Anonymous (NA). The first steps require one to admit to alcoholism and to dismiss any idea that alcoholics could ever again control their drinking. Addiction is attributed to biological factors that are believed to be unalterable. As such, abstinence is the only indicator of continued recovery. The next steps enlist the assistance of a supreme being or a higher power with the phrase “God as we understood Him”. Other steps emphasize action, promoting self-evaluation and behavioural changes.

AA is a widespread, free and accessible service for most seniors (Rush & Ogborne, 1992). Some researchers have expressed concern whenever senior clientele are required to admit to being an “alcoholic”. AA has a reputation as an effective program (Shipman, 1990), and anecdotal testimonies are common. It is difficult, however, to test the effectiveness of AA given there is no way to follow the anonymous participants, and drop-outs are unrecorded.

Some programs have been developed that maintain an emphasis on group participation, but not on the Twelve-steps. For example, Rational Recovery (RR) emphasizes personal responsibility and control over substance use, rather than lack of control as AA emphasizes. Secular Organizations for Sobriety (SOS) invites individuals to make rational decisions about their substance use (Maisto, Galizio & Connors, 1999).

2.9.2 Brief Interventions

There is a spectrum of severity of substance use problems, and it is believed that those experiencing mild or moderate difficulties comprise the majority of users (Zweben & Fleming, 1999). Full substance abuse treatment, however, may not be warranted, so brief interventions were developed in order to target the at-risk user. In non-dependent clients, brief interventions seek to promote reductions in substance use, while in dependent clients they facilitate referral to full treatment programs. In all cases, the goal is to increase motivation to change behaviour. Specific skills are not taught, nor are attempts made to alter social environments (Zweben & Fleming, 1999). Motivation to change is increased by having the client ask themselves questions about the pros and cons of their substance use, monitor their own behaviour, and self-regulate that behaviour. The premise is that changes will occur when perceived costs outweigh perceived benefits. Brief interventions usually include assessment, goal setting, behaviour modification techniques, and self-help literature. Interventions begin with asking questions about substance use and assessing medical, behavioural, or legal problems that may be related to substance use. Advice is offered in a clear, simple message that expresses concern about the substance use, and feedback is given on how the substance use may be affecting health and life. Goals of reductions in use, or abstention from use,

are set. These interventions can be used effectively by a variety of professionals, including substance abuse workers, physicians, nurses, dentists, social workers, psychologists, and counsellors (Zweben & Fleming, 1999).

Interventions can range from one meeting to four or five with a time length anywhere from 10 to 30 minutes. An educational approach is used that helps the senior to understand the reasons for their substance use. They are taught to recognize the triggers of substance use and methods for reducing the behaviour (Blow & Barry, 2000).

Studies on the effectiveness of brief interventions for alcohol use in seniors have yielded positive results (Blow & Barry, 2000; Fitzgerald & Mulford, 1992; Fleming, Manwell, Barry, Adams & Stauffacher, 1999). These methods may be especially effective in late-onset clients, or whenever the substance use is less severe (Schutte et al., 2001).

One barrier to effectiveness of brief interventions is lack of self-efficacy. If the individual doubts their capacity to change, brief interventions will not be sufficient to initiate the change process (Zweben & Fleming, 1999). Another barrier is that seniors can have difficulties identifying their own risky substance use. Similarly, if chronic disease is present, physicians may find it difficult to identify the role the substance use problem plays in the manifestation of the disease (Blow & Barry, 2000).

Technological Innovations

One related option for brief interventions is using a computer to assist in treatment provision. The use of computer generated reminder notes that automatically attach themselves to the front of a patient's chart can be used by service providers. Interactive Voice Recognition technology is a time and cost-effective method that allows service providers to collect data by telephone 24 hours a day, in addition to providing services to seniors whose life circumstances make them unable to attend on-site treatment. Clinic patients phone in and respond verbally or by touch-tone to menu prompts. Menu options include health education, self-help modules and self-monitoring (Blow & Barry, 2000).

Another innovation involves "tailored messaging" (Blow & Barry, 2000). A computer program will generate educational and workbook materials designed to meet the treatment needs of a specific individual, based on the information entered in the person's file. Case history, drinking history, health concerns, co-morbid disorders, social support and other relevant information allows for the creation of a comprehensive guide to treatment. This guide, when used in conjunction with other services, empowers the individual by providing them with the tools to control their own recovery (Blow & Barry, 2000).

2.9.3 Cognitive-Behavioural Approaches

Strict behavioural approaches to alcohol reduction are difficult to implement and reinforce with seniors if they suffer from a cognitive dysfunction that interferes with memory (Segal et al., 1996). Some researchers use a cognitive approach that helps seniors examine the antecedents, behaviours and consequences (A-B-C paradigm) of their substance use. They also provide substance use education, skills training in problem solving and social reinforcement (Dupree, Broskowski & Schonfeld, 1984 as cited in Segal et al., 1996).

Cognitive-behavioural approaches are based on behavioural principles of gradually changing behaviours by shaping and reinforcement, but includes thoughts, beliefs, and emotions among behaviours that can be targeted. Sometimes treatment proceeds by examination of the irrational base of core beliefs. Accordingly, treatment can proceed by addressing the thoughts and beliefs that underlie substance use problems. (Bortz & O'Brien, 1997).

Some irrational beliefs contribute to feelings of hopelessness and uselessness which seniors may self-medicate by abusing substances. Examples of such beliefs include 1) that they have no control over their life now that they are old, 2) that now that they are retired, they are worthless, 3) that if they are dependent on others they are worthless, 4) that they are too old to get married or to have a sex drive, 5) that senility, sickness and disability are inevitable, 6) that isolation and loneliness are a normal part of aging, and 7) that they are too old to change or to respond to therapy (Norton, 1998).

Rice, Longabaugh, Beattiem and Noel (1993) examined the response of older patients (50 and over), and younger patients (18-29 years of age) to three different kinds of treatments, one of which was cognitive-behavioural therapy. While no preferences were found in younger patients, older patients responded better to cognitive-behavioural therapy than they did to therapy targeting relationship enhancement, or relationship and vocational enhancement.

2.9.4 Psychosocial Approaches

Psychosocial treatment begins by focussing on aspects that are important to the senior, and aspects that they feel confident in. Initially, this may not be substance use. By building self-efficacy and social networks, the person will develop the strength to tackle the substance use problem (Baron & Carver, 1997).

Substance use problems can compound psychological problems. After long term reliance on a substance, the senior may exhibit poor coping skills, and feelings of frustration and inadequacy. These can be addressed by providing empathic understanding and training in coping and assertiveness skills. Long

term substance use can also mean a history of failures and disapprovals from family, employers and society. If the senior is not returning to work, treatment might focus on the development of skills and interests in leisure time activities (Baron & Carver, 1997).

Difficulties are often observed in being responsible to and for others (Baron & Carver, 1997). Treatment that addresses this lack of interdependency may begin by encouraging dependence on a counsellor or caregiver, then broadening the social support to encourage the client to engage in give and take. Individual counselling may be required initially, but the goal is usually to help the senior person feel comfortable joining a group and sustaining a social network (Baron & Carver, 1997).

The BRENDA is a psychosocial treatment model designed to identify and treat seniors with alcohol problems (Kaempf, O'Donnell & Oslin, 1999). Components of the program are shown below.

- B** Biopsychosocial assessment
- R** Report assessment findings to patient
- E** use Empathic approach
- N** patient Needs identified during the assessment
- D** Direct advice (based on the patient's needs)
- A** Assessment of the direct advice

The rationale for the model pertains to the fact that primary care givers without specialized substance use knowledge are often the first point of contact for an individual with substance use problems. These primary care givers can use the BRENDA anagram to remember the elements of treatment. An empathic approach is essential throughout the process. They must assess the patient's physical condition and personal history, screen for possible problems (using the CAGE or DSM criteria), identify patient needs, offer advice to alter drinking behaviour and provide follow-up through subsequent contact (phone or office). Kaempf et al. (1999) applied this model in conjunction with a double-blind test of Naltrexone or placebo. The researchers found that older adults (mean age 65) were more likely to attend treatment than younger adults (mean age 41), suggesting that this model is more effective with older adults. In comparisons with older patients receiving the BRENDA model and older patients receiving age-specific group psychotherapy, treatment attendance was higher with the BRENDA model. Kaempf et al. felt the BRENDA model was a valuable addition to alcohol treatment for seniors.

2.9.5 Outreach Services

Outreach services were developed in response to the perception that substance use problems were often hidden problems. Some seniors experience physical limitations that make travelling to treatment sessions difficult, and outreach may mean approaching the client in their own environment rather than expecting them to come to treatment providers (Baron & Carver, 1997; Segal et al., 1996). Also, historical contexts and social stigma may create a reluctance in seniors to admit to substance use problems (Shipman, 1990).

An outreach program in BC uses a systemic approach that reflects the shift to client-centred therapy. Traditional substance use assessment and treatment focusses on the individual, without regard for the external factors that shape behaviour. The systemic approach takes into account a person's social network and the way in which each individual's unique personal relationships influence their actions. Personal "empowerment and partnership among the parts of the individual's social ecology" are emphasized (Todtman & Todtman, 1997, p.406). Treatment is tailored to the needs of the senior and may include education, family consultation and referral to an appropriate program. Evaluation of the program showed that both clients and helpers felt greater self-efficacy, and problem symptoms reduced in severity and frequency (Todtman & Todtman, 1997).

2.9.6 Harm Reduction Approach

A harm reduction approach focusses on the harm that results from substance use problem, as opposed to focussing on the substance use itself (Graham, Brett & Baron, 1994). According to Oslin (2000b), since even low levels of alcohol consumption in seniors can have deleterious effects, any reduction in drinking behaviour will likely be beneficial. Similarly, a reduction in benzodiazepine use will contribute to improved personal health and functioning (Oslin, 2000b). Harm reduction approaches also need to address misuse of prescription medications by finding ways to increase compliance with prescription or over-the-counter medications (Kostyk et al., 1994).

Programs operating under a harm reduction framework may appeal to those who have not been successful with conventional abstinence-oriented treatment (Graham et al., 1994; West & Graham, 1999). In harm reduction approaches, relapses are seen as a normal part of the recovery process, and do not mark the end of treatment. Usually, harm reduction programs will tolerate continued substance use, and may be especially applicable in treating prescription medication problems, for example, if someone with chronic or severe pain needs to remain on a low dose opioid, or those with depression or anxiety require a maintenance dose of benzodiazepine. Decreases in

problematic prescription use may be accomplished by “tapering” which involves a slow but steady reduction in the dose and frequency of the drug over time (Kostyk et al., 1994).

Individual counselling under a harm reduction framework offers support irrespective of substance use. The approach is empathic and non-confrontational, and focusses on the overall lifestyle rather than only on the substance use (Graham et al., 1994). When following a harm reduction approach, counsellors and group facilitators demonstrate that they are willing to start from whatever stage the person is at and help them move towards reduced substance use. A non-confrontational, non-judgmental atmosphere is used to encourage learning and self-awareness (Royer, et, 2000) and permits clients to examine the external forces that motivate behaviour.

Many harm reduction programs use group therapy. Group therapy can foster feelings of belonging, help establish goals for recovery, offer support with the practice of new behaviours, provide a venue for discussion of substance use issues, and increase participation in persons who otherwise may be socially isolated (Kostyk, et al., 1994; Segal et al., 1996). A group format allows for general discussion of issues relevant to substance use without targeting a specific individual. It can also provide a social support that facilitates recovery maintenance (Royer et al., 2000).

2.9.7 Pharmacological Interventions

Seniors with alcohol dependence problems have not traditionally received pharmacological agents as part of the treatment process (Oslin & Blow, 2000). Disulfiram is a drug that has been used in the treatment for alcohol problems and has also been used to treat younger patients with a joint cocaine and alcohol dependence (Health Canada, 2000). While it may be a helpful adjunct to therapy for younger individuals, use of disulfiram in seniors has not been recommended because of potentially serious adverse effects (Oslin & Blow, 2000; Rigler, 2000).

Naltrexone is an opioid antagonist. Studies conducted on middle-aged patients with alcohol dependence concluded that naltrexone produced few harmful side effects. It also proved effective in reducing the craving for alcohol and assisted with relapse prevention (Oslin & Blow, 2000). When naltrexone was tested on veterans aged 50 to 70, respondents reported improvements in relapses to heavy drinking, though not improvements in achieving abstinence (Oslin, Liberto, O'Brien, Krois & Norbeck, 1997 as cited in Oslin & Blow, 2000).

Acamprosate is a new agent that is being tested for treatment of alcohol dependence. Results with younger populations have been promising, but studies on its efficacy and safety in senior patients have not been examined (Oslin & Blow, 2000).

2.10 Barriers to Treatment

Key Points

- Sensory limitations and difficulties with mobility or transportation constitute barriers to treatment.
- There are a variety of views among health professionals about criteria for problems with substance use.
- Denial and memory lapses can contribute to under-diagnosis of substance use problems.
- Shame and guilt may hinder some seniors from admitting to a substance use problem.
- Some people who have contact with seniors may enable the continuation of problems with substance use. Enabling attitudes can include the belief that seniors should be left alone to use substances if they choose, that substance use is embarrassing and best left unaddressed, or that seniors are too resistant to change.

2.10.1 Practical Considerations

Segal et al. (1996) list the following practical barriers to accessing treatment:

- ◆ physical infirmity;
- ◆ hearing or vision problems that interfere with ability to participate;
- ◆ not having the treatment centre in a convenient location;
- ◆ having no mode of transportation; and
- ◆ programs that require a live-in stay may be a deterrent to seniors who do not want to leave their own home.

Someone “who is in poor health, cannot get around, is living in unhealthy circumstances, or is confused, will not be able to deal with alcohol and drug use until these immediate problems are addressed” (Baron & Carver, 1997, p. 279).

2.10.2 Mis-diagnosis

Health professionals have differing views as to what constitutes alcohol or substance dependence. According to Solomon et al. (1993), the lack of specific definitions, of age sensitive screening tools and of consistent criteria by which to diagnose a problem in seniors may lead to under-diagnosis (failure to detect a problem) or mis-diagnosis. Co-morbid conditions, for example, physical symptoms such as gastritis or dizziness, or psychiatric symptoms such as dementia, depression or insomnia, further complicate diagnoses.

2.10.3 Denial

Some seniors do not want to admit that they have a problem and will use denial, rationalization, defocussing and minimization to explain their behaviour (Solomon et al., 1993). Many assessment tools are based on self-reports, and therefore depend on accurate and honest responses. Overt denial and forgotten episodes of substance use can contribute to underdiagnosis (Buchsbaum et al., 1992; Solomon et al., 1993).

2.10.4 Social Stigma

Depending on the age of seniors, they may have been raised during the prohibition era. This era was followed by a period of time in which alcoholism was viewed as immoral and some seniors may view their substance dependence as a moral weakness (Rush & Ogborne, 1992). Shame and guilt often prevent this cohort from admitting publicly to a problem (Blow & Barry, 2000).

2.10.5 Fear of Failure

Many people are afraid to try something new for fear they will not succeed. This type of thinking maintains patterns of behaviour, despite negative or harmful consequences. According to Segal et al. (1996), for late-onset heavy drinkers, fear combines with discouragement over previous unsuccessful attempts to attain sobriety, and may create a sense of hopelessness. Individuals may believe that they are incapable of changing and therefore stop trying (Baron & Carver, 1997).

2.10.6 Enabling Attitudes and Behaviours

Enablers include family, friends, caregivers and physicians who believe that the senior does not have much left in life to enjoy, so should be allowed to drink. Enablers shield them from the consequences of their actions (Baron & Carver, 1997; Mellor et al., 1996; Segal et al., 1996; Tabisz, Jacyk, Fuchs & Grymonpre, 1993). Whereas younger adults often decide to seek treatment as a result of pressure from family members, lack of education about the harmful

effects of substance use in seniors and misguided intentions may stop enablers from encouraging the senior to change (Segal et al., 1996). As well, family members who want to protect the senior from embarrassment may misrepresent the substance use problem (Buchsbaum et al., 1992).

2.10.7 Attitudes of Health Professionals

Parette, Hourcade and Parette (1990) investigated attitudes of medical health professionals toward patients with alcoholism. Health professionals were observed adopting a moralistic perspective toward alcoholism with these patients. They tended not to pay as much attention to them and attributed complaints and behaviours to the alcoholism, even when such judgments were not warranted. The researchers suggested that such attitudes may interfere with treatment and recovery.

The “ageist” bias exists among some health professionals who believe that seniors are too old to learn something new, especially if it requires change. Corresponding to this is a belief that ingrained patterns of behaviour are too resistant to change (Mellor et al., 1996; Tabisz et al., 1993). Danzinger and Welfel (2000) examined age bias by devising theoretical case studies (with age, gender and health as variables) and submitting them to mental health counsellors for assessment and diagnosis. Counsellors were also asked to judge the theoretical client for competence and prognosis. Results showed that the seniors were seen as significantly less competent and their prognoses were more negative (Danzinger & Welfel, 2000). This attitude that senior people are resistant to change, and therefore more difficult to work with, may account for some of the enabling behaviour of health professionals who do not encourage treatment for their substance dependent patients (Danzinger & Welfel, 2000).

2.11 Specific Groups: Aboriginals

Key Points

- ▶ Alcohol and drug use problems are recognized in Aboriginal communities.
- ▶ To treat Aboriginals for substance use problems, it may be helpful to incorporate cultural and spiritual elements into treatment programs.

Aboriginals represent 3% of the total population of Canada (approximately 800 000 people) and are comprised of three major native groups: Indian, Métis and Inuit (Scott, 1992). Aboriginals are a young population. According to a discussion of a report from Canada's Royal Commission on Aboriginal Peoples (1996), more than 50% of Aboriginals are 25 years of age or younger (Nemeth & Hiller, 1996). Their birth rate of 27 per thousand is more than twice the Canadian average of 13 per thousand, contributing to the large number of young people within the population (Indian and Northern Affairs, 2000).

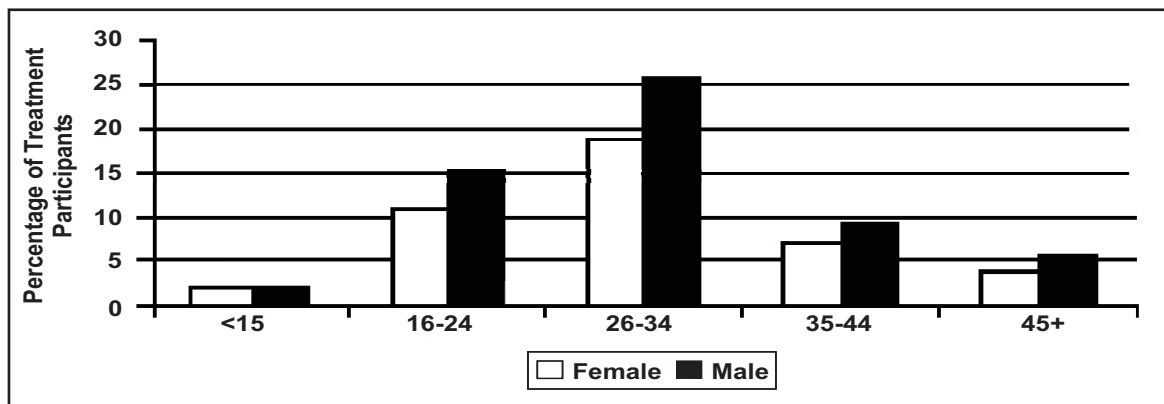
There is a difference in life expectancy between Aboriginals and other Canadians. First Nations men can expect to live to 66.9 years, unless they live on a reservation and then their life expectancy is reduced to 62 years. First Nations women have a life expectancy of 74 years; again, life on a reserve lowers this number to 69.6 years. These numbers differ significantly from the general Canadian population expectations of 74.6 years for men and 80.9 years for women (Indian and Northern Affairs, 2000). Most of the efforts regarding substance use problems are directed toward Aboriginal youth, with little resources being directed towards senior Aboriginals. In other cultures, researchers sometimes use liver cirrhosis rates to predict the prevalence of alcohol abuse. Within the Aboriginal population, however, they may not live long enough to develop cirrhosis, and so even this data can be elusive (Scott, 1992).

2.11.1 Substance Use Problems

Some of the difficulty associated with obtaining substance use data lies with the fact that non-native researchers do not often have enough knowledge of native culture to design studies appropriate to the milieu. Many Aboriginal communities prefer to deal with their own problems without interference or assistance from outsiders. Some groups refuse to participate because they feel they have been "overstudied" with no significant improvement in their situation (Scott, 1992).

According to data from the Aboriginal People's Survey, 62% of Aboriginals indicated that there were alcohol use problems in their community and 48% believed communities had drug problems (Indian and Northern Affairs, 2000).

**Table 2: Treatment Participation in NNADAP Centres by Age and Gender
April to September, 1991**



The data in Table 2 are based on clients attending the 51 treatment centres, which were operated by the National Native Alcohol and Drug Abuse Program (NNADAP) in 1991 (Scott, 1992) (as of 2003, there are 48 treatment centres). All groups identified alcohol as the substance most commonly abused. Men outnumber women, and younger people form the majority of clients. A cutoff age of 45 and over represents the older portion of the group (Indian and Northern Affairs, 2000; Scott, 1992; Spencer, 2000). For Aboriginal populations, age-specific treatment considerations may vary compared to other senior populations. Treatment programs must consider the appropriateness of their treatment modalities, taking into account presenting needs and life issues of the groups with whom they work.

One group of researchers at Lakehead Psychiatric Hospital in Thunder Bay, Ontario compared native (all ages) and non-native admissions to the hospital and affiliated mental health agencies during a 6-month period (Dalrymple, O'Doherty & Nietschei, 1995). Fifty percent of the native admissions received no other psychiatric diagnosis apart from substance abuse. Furthermore, natives were admitted at a rate 33 times greater than their local population base rate. Length of stay also differed between the two groups with natives staying on average twice as long as non-natives.

Depression was underdiagnosed. Dalrymple et al. (1995) suggested that cultural stereotyping may contribute to overidentification of substance abuse and underidentification of primary depression if clinicians believe that "passivity, averted gaze, withdrawal and minimum verbal behaviour are related to ancestry or tradition rather than to affective condition" (Dalrymple et al., 1995, p. 472).

Information specifically aimed at senior Aboriginals with substance use problems is virtually non-existent. One exception is the Kanawahke reserve in Quebec who rated alcohol as one of the top three concerns for Aboriginal seniors in a recent community needs assessment (Spencer, 2000).

2.11.2 Treatment

Like other seniors, Aboriginals may need outreach services before they access appointment based treatments, especially in communities that are geographically isolated. It may be necessary to incorporate cultural and spiritual elements into treatment programs for Aboriginals who embrace these traditions. (Rush & Ogborne, 1992). Some Aboriginal groups have developed unique modes of treatment to facilitate the healing process, based on Aboriginal traditions and values. Storytelling, teaching circles, sharing circles and various ceremonies such as sundances, sweats, pipe ceremonies and medicine lodges emphasize the role of spirituality and reconnection to the natural environment (Poonwassie & Charter, 2001). The role of the tribal “elder” is valued but the elder is not necessarily a senior person. Rather, they are someone who is rich in the history and traditions of their culture with enough life experience to make this understanding relevant to others. The recent emphasis on culture-oriented treatment approaches reflects the recognition that treatment must be tailored to the needs of the individual (Poonwassie & Charter, 2001).

3. Interviews with Key Experts

3.1 Selection of Key Experts

A list of key experts was identified in consultation with members of Health Canada ADTR Working Group. Twenty-nine key experts were selected from across the country with representation from each province and the Yukon Territory. Tables 3 and 4 provide the location and the professional role of the interviewed professionals:

Table 3: Geographical Distribution of Key Experts

Yukon	2
British Columbia	6
Alberta	2
Saskatchewan	1
Manitoba	4
Ontario	5
Quebec	1
New Brunswick	2
Nova Scotia	1
Prince Edward Island	1
Newfoundland and Labrador	4

Table 4: Professional Roles of Key Experts

Roles of Key Experts	Number of Key Experts
Frontline workers involved in outreach, counselling, peer advocacy or home care	14
Direct service provision and administration	8
Government positions	4
Academic/Researcher	3

Table 5 provides data related to the diversity of training held by the key expert respondents.

Table 5: Academic Background of Key Experts

Number of key experts who answered this question: 29 * Some key experts indicated multiple fields of training	
Academic Background	*Number of Key Expert Responses
Social work	12
Medicine and nursing	10
Psychology	7
Administration	3

3.2 Key Expert Interview Process

Key experts were contacted from each province and territory who had expertise in the area of treatment services for seniors with substance use problems. The interviews were structured and covered a range of treatment and service delivery considerations including:

- ◆ theoretical orientation;
- ◆ risk factors for substance use;
- ◆ areas to be addressed in treating seniors with substance use problems;
- ◆ outreach, contact and engagement;
- ◆ assessment components;
- ◆ barriers to participation in treatment and rehabilitation programs;
- ◆ principles that guide treatment processes;
- ◆ model program components;
- ◆ aftercare; and
- ◆ measuring effectiveness.

The data from the key expert interviews were subsequently compiled and analyzed for themes.

3.2.1 Theoretical Orientation

Respondents were asked to identify the most influential programs, clinicians, researchers and literature that have contributed to the advancement of treatment services for seniors with substance use problems. The Community Outreach Program in Addictions (COPA) program in Toronto was repeatedly cited as one of the most influential and recognized services. Many respondents were also aware of Spencer's work in increasing awareness of programs for seniors, and mobilizing resources.

With the exception of McKim & Mishira's work, many respondents noted that there is very little literature that is specific to the field of problem substance use in seniors. Experts noted that the more generalized approaches in substance use treatment have commonly been adapted into this specialized area. Noted examples included Miller & Rollnick's motivational interviewing and Prochaska & DiClemente's model of stages of change which both emphasize client-centred treatment and the tailoring of treatment strategies to the specific need of the client. Other noted researchers included Bowen & Bolby who have written on family dynamics and Roland Atkinson who underscores the need for senior specific approaches.

Both the Community Outreach Program in Addictions (COPA) program and the harm reduction approach were recognized as incorporating the most influential and helpful philosophies for many clinicians including:

- ◆ a respectful approach towards seniors;
- ◆ using outreach services;
- ◆ proceeding at a slower pace when appropriate or necessary; and
- ◆ meeting the specific needs of seniors rather than exclusively focussing on substance use or abstinence issues.

3.2.2 Risk Factors for Substance Use

a) Alcohol

Key experts noted that major risk factors associated with problem use of alcohol included:

- ◆ experiencing multiple losses;
- ◆ loneliness;
- ◆ isolation; and
- ◆ history of use.

Seniors' experiences of the loss of family or spouse can act as a significant risk factor towards substance use problems. The roles that were assumed by a deceased spouse or family member may no longer be filled, which can impact the senior's care, health, mobility, social activities, and/or financial stability. If multiple losses occur with little time to recover between losses, isolation can increase, leading to loneliness and boredom, which may then exacerbate substance use patterns.

The key experts noted further risk factors including:

- ◆ a history of long-term habitual family or personal substance use patterns;
- ◆ the removal of external structures, such as work, thereby increasing the time for alcohol use;
- ◆ social drinking that is central to networking activities, without which increased isolation would be experienced;
- ◆ seniors' inability to metabolize alcohol as easily as their younger counterparts;
- ◆ cognitive impairments or dementia that may affect memory of, or disinhibition for, excessive drinking;
- ◆ other mental health problems including anxiety, depression, unresolved physical or sexual child abuse; and
- ◆ elder abuse or neglect.

Key experts noted that alcohol is attractive to seniors, given that it is socially accepted and easily obtained. Alcohol may also be used to manage chronic pain. Seniors may use alcohol or combine it with medications to alleviate symptoms of other chronic medical conditions. Some may also believe it will help with sleep problems although the evidence is to the contrary.

Table 6: Key Experts: Risk Factors for Problem Alcohol Use

Number of key experts who answered this question: 28	
Risk Factors for Problem Alcohol Use	Number of Key Expert Responses
Loneliness/isolation and boredom	23
Multiple or sequential losses	19
Family or personal history	15
Chronic conditions	15
Psychiatric co-morbidity	12
Physiological changes due to aging	8
Ease of access	5

b) Illicit Drugs

Key experts indicated that there is currently not a lot of illicit drug use among seniors. They do expect problems to become more evident as baby boomers age, as they will have had different experiences with such drugs as cocaine, marijuana, heroin, and illicitly purchased prescription medications.

Key experts noted that when illicit drug use is observed in seniors, the drugs may be used for their analgesic or euphoric effects. Key experts noted that seniors may be at increased risk of problem use if they are isolated, bored or lonely. In addition, they are at greater risk if they have a history of previous use or if exposed to others using illicit substances.

Key experts noted that protective factors against problem use of illicit substances include:

- ◆ their lack of availability;
- ◆ social stigma; and
- ◆ provision of adequate pain management services.

Table 7: Key Experts: Risk Factors for Illicit Drug Use

Number of key experts who answered this question: 28	
Risk Factors for Illicit Drug Use	Number of Key Expert Responses
Not a problem yet	20
Effects of the drugs	7
Boredom/isolation/loneliness	7
Past history of use	4
Exposure to users	3

c) Prescription Medications

Key experts most often attributed problem use of prescription medications to over-prescribing by physicians, coupled with the lack of questioning on the part of seniors. Some seniors may assume that prescription medications are not harmful if their physician has recommended them. Some seniors may expect that because medication is available, it should be prescribed at the first sign of an ailment.

Key experts recommended that physicians receive further training in adjusting dosages to the slower metabolism of seniors and that greater emphasis be placed on reviewing the medication history of seniors. Other factors that impact excessive prescribing of medication by physicians include:

- ◆ dependence on the use of medications rather than counselling or other alternative treatment regimens such as diet or exercise;
- ◆ treatment of side effects of medications with additional medications; and
- ◆ prescriptions that are renewed for longer than is necessary, with an “auto repeat” in place.

Other factors that can contribute to misuse of medication among seniors include:

- ◆ seniors may be unaware or misunderstand the intended use of their medications;
- ◆ they may not recognize that a generic or over-the-counter drug may be the same as a prescription drug, inadvertently leading to double dosing;
- ◆ they may be unaware of interactions between multiple prescription medications or in combination with alcohol;

- ◆ low literacy levels and/or vision problems may interfere with compliance;
- ◆ some seniors may see multiple physicians and request the same prescription, thereby purposely increasing their dose;
- ◆ some seniors may experience a greater accessibility to prescription medications through increased contact with the health care system, a sharing of prescription medications among peers or using their spouse's medications; and
- ◆ they may be at increased risk of problem use if they are experiencing physical and/or mental health problems such as pain, insomnia, psychological trauma, grief, anxiety or depression.

Key experts reported that problem use with prescription medications is often observed with the following drugs:

- ◆ morphine or codeine-based products;
- ◆ anti-anxiety medications such as benzodiazepines;
- ◆ sleeping aids including sedatives and tranquilizers; and
- ◆ anti-depressants such as the selective serotonin reuptake inhibitors.

Table 8: Key Experts: Risk Factors for Misuse of Prescription Medication

Number of key experts who answered this question: 28	
Risk Factors for Misuse of Prescription Medication	Number of Key Expert Responses
Over prescribing by physicians	20
Lack of awareness among seniors	13
Accessibility	12
Ill health	10
Expectations among seniors	7

Table 9: Key Experts: Prescription Medication Most Frequently Misused

Number of key experts who answered this question: 28	
Prescription Medication Most Frequently Misused	Number of Key Expert Responses
Opiate and codeine-based products	25
Benzodiazepines	18
Sleep aids	13
Anti-anxiety medications	9
Anti-depressant medications	5

d) Over-the-counter Medications (OTC)

Risk factors identified by key experts for the misuse and/or abuse of over-the-counter medication included:

- ◆ a lack of awareness;
- ◆ a lack of cautionary mechanisms in place to protect seniors;
- ◆ a lack of awareness among seniors of the interactions of OTCs with other medications or alcohol;
- ◆ the small font labelling on the boxes, inserts and labels;
- ◆ literacy problems that make information inaccessible;
- ◆ perception that OTC drugs are safe due to their ease of accessibility;
- ◆ advertising or television promotions of OTC medications without issuing cautions;
- ◆ reduced ability of seniors to metabolize these medications;
- ◆ physicians not asking about OTC use; and
- ◆ OTCs used together with the same drug by prescription.

OTCs are at times combined with prescription drugs, either inadvertently due to lack of awareness of the interactions, or purposely to increase the effect of prescription drugs. Sleeping problems and pain are the most commonly self-medicated conditions. Key experts reported that the most common OTCs used by seniors are analgesics, sleep medications, cough and cold remedies, and laxatives.

Table 10: Key Experts: Risk Factors for Misuse of Over-the-counter Medication

Number of key experts who answered this question: 26	
Risk Factors for Misuse of Over-the-counter Medication	Number of Key Expert Responses
Lack of awareness of interactions	14
Lack of cautions or protective mechanisms	7
Poor labelling of information	7
Intent to increase the effect of prescriptions	5
Slower metabolism	5
Difficult to track OTC use or identify a problem	4
Ease of availability	3

e) Alternate or Herbal Medications

Key experts reported that much like OTCs, the use of herbal and alternate medications is difficult to track, limiting the possibility of establishing patterns of problem use. Lack of standards and scientific knowledge concerning the active ingredients, dosages, and interaction patterns with prescription medications, also confuses any attempts to gain a perspective on the impact of misuse of alternative medication. Concern was raised among several respondents that seniors might perceive herbal medicines as natural and assume that “natural” is “safe.” These concerns also apply to ethnocultural Aboriginal communities that have recourse to traditional medicines.

Table 11: Key Experts: Risk Factors for Misuse of Alternative Medications

Number of key experts who answered this question: 25	
Risk Factors for Misuse of Alternative Medications	Number of Key Expert Responses
Difficult to track use	8
Do not know effects	7
Do not know interactions with other substances	7
Natural may be perceived as safe	5

f) Multiple Substances

Problem use of multiple substances can refer to the use of alcohol with prescription medications, and/or combining multiple prescription medications, OTCs, illicit, or alternative medications. Key experts reported that substances are often combined because the senior and/or their doctor may be unaware of the dangers related to certain drug interactions. Physicians may not review or have access to the senior’s medication history. Alternatively, the senior may combine drugs to elicit a particular reaction or effect, or to increase the dose. Seniors who are in ill health often have need of multiple prescriptions that even when appropriately taken, may cause problems.

Table 12: Key Experts: Risk Factors for Misuse of Multiple Substances

Number of key experts who answered this question: 28	
Risk Factors for Misuse of Multiple Substances	Number of Key Expert Responses
Unaware of interactions	10
Combine to increase effects	3
Ill health	4
Over-prescribing practices	2

3.2.3 Areas to be Addressed in Treating Seniors with Substance Use Problems

Many key experts identified the need for better co-ordination of services wherein agencies are linked to a comprehensive and well-resourced continuum of care. The use of multi-disciplinary teams was recommended.

Respondents cited the importance of increasing awareness and education efforts among members of the public, physicians and seniors themselves. Public information related to substance use problems must be specific to seniors rather than generic to all adults.

Many key experts identified the importance of establishing programs that are non-confrontational, flexible and based on harm reduction approaches. Services must go beyond the immediate issue of substance use and address the socio-economic and other needs of the client. Treatment approaches must include resolving the client’s day-to-day health, social and living needs.

Outreach was also identified as a key priority. Seniors are often unwilling or unable to leave their home, so treatment services must be prepared to go to them. Some seniors may at times experience distrust of services organized and managed by government or bureaucratic organizations. Approaching these clients in their own environment may reduce anxieties, help to build rapport, convey respect and trust and an understanding of the client’s way of life. A comprehensive continuum of services would include home detoxification and/or supportive housing services. Key experts highlighted the importance of making transportation services available.

Table 13: Key Experts: Areas to Address

Number of key experts who answered this question: 28	
Areas to Address	Number of Key Expert Responses
Harm reduction approach	11
Outreach, home services	11
Education	11
Co-ordination of services	5
Trained personnel	5
Transportation	4
Supportive housing	4

3.2.4 Outreach, Contact & Engagement

a) How Seniors Generally Access Treatment Services

Key experts reported that the most frequent sources of referrals for seniors with substance use problems are:

- ◆ health care professionals;
- ◆ family members;
- ◆ social service agencies;
- ◆ self-referrals; and
- ◆ legal system.

Many respondents also noted that in some Canadian regions, there are very few services for seniors to access.

Table 14: Key Experts: Referral Sources

Number of key experts who answered this question: 28	
Referral Sources	Number of Key Expert Responses
Health care professionals	19
Family or friends	16
Acute care or emergency department	10
Community care access co-ordinators	8
Nursing homes, long term care facilities	7
Self-referrals	7
Social services	5
Court system	5

b) Challenges Encountered by Seniors in Accessing Services

Feelings of embarrassment and shame were identified as the key challenges faced by seniors when accessing services. Seniors often fear the stigma associated with substance use problems and consequently find it very difficult to request help. These challenges are often exacerbated by a reluctance to participate in programs that put them with younger adults. Seniors may feel frightened or anxious when their younger counterparts are being treated for issues related to illicit drugs. Younger adults may also use colloquialisms that are unfamiliar to seniors, heightening any sense of inadequacy or anxiety.

Key experts also reported that some regions lack appropriate services or that seniors may be unaware of their availability. Other obstacles to accessing services include client's unwillingness to leave their home or community, transportation issues, the lack of financial resources, and the inability of services and programs to accommodate impairments related to physical mobility, sensory deficits or cognitive difficulties.

Table 15: Key Experts: Challenges in Accessing Services

Number of key experts who answered this question: 28	
Challenges in Accessing Services	Number of Key Expert Responses
Stigma, shame	18
Transportation	14
Mobility and sensory difficulties	11
Unaware of services, lack of services	9
No age specific programming	8
Financial barriers	5

c) Approaches for Linking Seniors with Appropriate Treatment Services

Key experts reported that the most effective method to link seniors with treatment services is through outreach services that are based on a harm reduction model. Outreach ensures that services are offered to seniors in their own home or environment. In turn, the harm reduction model recognizes the importance of addressing matters related to health or other identified client needs without being exclusively focussed on abstinence issues. A non-confrontational, non-threatening and unhurried approach is the most useful to help build rapport and lead to the identification of other needs related to substance use problems among seniors.

The use of multidisciplinary teams was also noted as a significant advantage as it ensures representation from multiple service providers. In certain communities, many government agencies and service providers could benefit from enhanced coordination through closer cooperation and collaboration. In many instances, service providers could benefit from maintaining service linkages with each other. Coordinated and comprehensive case management services should be provided to seniors when required.

A focus on training and education for professionals working with seniors was also recommended by many of the key experts. Personnel such as nurses working with seniors in areas unrelated to substance abuse could be offered training in basic addiction assessment skills to help them recognize needs for services. Others who will come into contact with seniors, such as building managers, must also be educated to recognize substance use problems among seniors. Within substance abuse treatment programs, key experts recognized that

greater importance must be placed on ensuring personnel are appropriately trained with concepts in gerontology, as well as substance use issues.

Table 16: Key Experts: Approaches for Linking Seniors with Services

Number of key experts who answered this question: 28	
Approaches for Linking Seniors with Services	Number of Key Expert Responses
Harm reduction and outreach	15
Co-operation among agencies	9
Training/education	6
Senior specific programs	2

3.2.5 Assessment Components

a) Aspects of Functioning that Should be Screened or Assessed

Key experts reported that the main aspects of functioning assessed among seniors seeking treatment services should include:

- ◆ physical and psychological health;
- ◆ social activities;
- ◆ interpersonal relationships;
- ◆ the physical environment; and
- ◆ competency with activities of daily living.

Assessments of physical health focus on mobility, sensory limitations, nutrition, and whether the client is in pain. Supplements of vitamins C and B-complex including thiamine are often recommended for seniors using alcohol in order to prevent neurological deficits and/or ameliorate their progression. A medication review should be undertaken, with questions for example, directed to understanding medication side effects. Some experts also include specific assessments to evaluate patterns and the extent of substance use.

Mental health screening should also be done to test such areas as:

- ◆ memory and cognitive impairments;
- ◆ dementia;

- ◆ depression and anxiety; and
- ◆ coping mechanisms.

Some programs explore social aspects of the senior’s functioning, including:

- ◆ interpersonal and family relationships;
- ◆ the degree of social isolation;
- ◆ the dependence on family and caregiver stress;
- ◆ susceptibility to elder abuse; and
- ◆ identification of protective supports.

Importance is also placed on assessing the various aspects of their environment, especially home and neighbourhood safety. Other areas assessed that were mentioned by the key experts include financial status, and their spiritual and cultural context.

Table 17: Key Experts: Aspects of Functioning to be Assessed

Number of key experts who answered this question: 27	
Aspects of Functioning to be Assessed	Number of Key Expert Responses
Physical health	24
Mental health	23
Social activities	16
Activities of daily living	13
Environment	12
Medication/substance use	7
Finances	7
Spiritual/cultural	3

b) Instruments and Formal Assessment Processes

Key experts described a range of instruments they used as part of the initial assessment process. Some of these instruments included screening measures for alcohol or drug use, whereas other instruments assessed additional areas of functioning such as depression and cognitive status. Examples included:

- ◆ MAST-G: Michigan Alcohol Screening Test – Geriatric Version;

- ◆ MAST/CAGE;
- ◆ AUDIT: Alcohol Use Disorders Identification Test;
- ◆ MDDS: Manitoba Drug Dependency Screen;
- ◆ SUDDS: Substance Use Disorder Diagnostic Schedule;
- ◆ SASSI: Substance Abuse Subtle Screening Inventory;
- ◆ ASI: Addiction Severity Index;
- ◆ *L'indice de la gravité de la toxicomanie*;
- ◆ Mini Mental Status Exams;
- ◆ GDS: Geriatric Depression Scale;
- ◆ BDI: Beck Depression Inventory;
- ◆ DATIS: Drug and Alcohol Treatment Information System;
- ◆ FIMS: Functional Instrument Measurement Scale; and
- ◆ ADL: Activities of Daily Living.

Alcohol and drug screening tools were generally recognized as useful in providing quick and simple overviews of substance use problems. These screening tools, however, are limited in that they do not provide a global picture of the client's functioning. More in-depth assessment tools incorporate both formal and informal data gathering procedures. Although these approaches were viewed as quite beneficial, they tended to require a greater commitment of time and effort on the part of the client and agency. Language, modest education, and cognitive impairments were noted as potential barriers to using various assessment tools.

One area of potential difficulty is that tools designed to investigate potential substance use problems do not take into account possible comorbid features or other conditions which may present similar symptomology. It is important, therefore, to make a comprehensive assessment, taking into account both social and medical history.

c) **Individuals Who Should be Involved in the Assessment**

Key experts were asked to identify the preferred sources of information for the assessment process. They suggested engaging individuals who are involved in the physical care of the senior during treatment and recovery such as:

- ◆ physicians;
- ◆ nurses;

- ◆ home care providers;
- ◆ family members; and
- ◆ other multidisciplinary team members.

Physicians should be made aware of the referral so they can provide crucial information on medications. Some key experts suggested that physicians are often too busy to assume a major role in the treatment team processes, but should maintain involvement by co-ordinating medical services.

Family members, friends or significant others are often involved in the assessment process. They may be able to provide further or corroborating information on issues of substance use, especially in cases where the client denies or minimizes use. They can also provide insight into the day-to-day management of the senior and provide ideas on how to support the client through treatment and recovery. By involving family members and friends, clinicians can offer support and suggestions on how to cope with the client when caregiver stress is a concern. Key experts did caution however, that in cases of elder abuse, family involvement must be carefully assessed.

Some respondents reported that the decision to include other individuals in the assessment must lie with the client, as they are ultimately responsible for setting their treatment goals. Others felt that only the client should be involved in the assessment, as involvement from others may adversely impact the therapeutic alliance.

Table 18: Key Experts: Individuals Who Should be Involved in Assessments

Number of key experts who answered this question: 27	
Individuals Who Should be Involved in Assessments	Number of Key Expert Responses
Physician, home care, and multidisciplinary team	18
Collaterals: family or friends	16
Decision left to client	6
Client alone	2

d) Steps to Enhance Present Assessment Practices

Key experts reported that present assessment practices could be significantly improved through the development of better tools. Assessments must be senior specific, standardized, and explore the consequences of substance use. They should also account for denial as many current assessment and screening tools depend on self-reported data.

An unhurried approach is recommended for assessing older adults. The assessment is viewed as a crucial vehicle to build rapport with the client. A longer assessment period may therefore be warranted. Some key experts recommended a move away from the standard structured question-and-answer type format, preferring to allow the information to be gathered once the relationship is properly established.

Key experts cited the importance of placing the assessment’s focus on the whole person, not just on the substance use. They also noted that assessments would benefit from increased co-ordination among service providers, especially hospitals and community services. A standardized assessment tool accessible to the range of service providers would reduce the need to provide the same information to different people.

Table 19: Key Experts: Steps to Enhance Present Assessment Practices

Number of key experts who answered this question: 18	
Steps to Enhance Present Assessment Practices	Number of Key Expert Responses
Improved tools	7
Unhurried approach	6
Co-ordination of services	4

3.2.6 Barriers to Participation in Treatment and Rehabilitation Programs

a) Personal Barriers

The most frequently cited personal barrier impeding seniors’ access to treatment and rehabilitation services was shame. Participation in group treatment and rehabilitation programs is often difficult for seniors if public testimonials are required. Another barrier is lack of awareness – where the person does not recognize that they have a

problem. Again, culture may be a factor when substance use patterns are considered normal. Lack of awareness is also a problem with prescription medications, if seniors do not recognize that use can be a problem.

As previously stated, seniors may also face transportation barriers or experience difficulties with their own mobility. Sensory limitations such as poor hearing or vision can make them reluctant to leave their home and can make it difficult to participate in groups.

Key experts suggested that shame and denial be addressed through widespread education efforts aimed at the general public but more specifically to seniors. Shame and denial can also be addressed by tailoring interventions specific to seniors. Key experts repeatedly advised that interventions be non-confrontational, unhurried, and focussed on resolving the issues the client identifies as problematic. Approaches identified as appropriate for seniors were those that aim to improve quality of life and do not target substance use directly unless identified by the senior as a problem.

The issue of discomfort with group participation should be addressed by making available a range of interventions to the senior, including individualized treatments. Some key experts claimed that abstinence-based programs are inappropriate for seniors, while others suggested that abstinence-based services should be modified to be senior specific, with a slower pace when necessary and more opportunities for social activities. Treatment environments should be senior friendly, accessible, quiet, comfortable, and warm, while outreach services are recommended to counter problems with rapport building, transportation, mobility, and sensory limitations. Key experts also noted that those with cognitive impairments have special needs, and require more persistence on the part of clinicians.

Table 20: Key Experts: Personal Barriers

Number of key experts who answered this question: 27	
Personal Barriers	Number of Key Expert Responses
Shame, stigma	17
Mobility, transportation	16
Not recognizing a problem	9
Sensory limitations	9
Cognitive impairments	9
Isolation	5
Group involvement is difficult	5
Poor health	4
Depression or anxiety	4

b) Interpersonal Barriers

Family members, spouses, friends and those who have contact with the senior may also contribute to barriers to treatment access. These may be caused by a range of reasons including the possibility that the client has overextended the patience of his or her support network. Seniors may increase their isolation if support networks tire and give up. Other barriers may include the following:

- ◆ families may deny that a substance use problem exists;
- ◆ families may engage in enabling behaviours, perhaps by providing the alcohol or other substances;
- ◆ families may fear reprisals if they confront the senior about their substance use (for example, they may fear being left out of the will);
- ◆ a senior who is dependent on their caregiver to provide alcohol may avoid the topic of treatment because they fear that their supply will be stopped;
- ◆ the senior may want to access treatment, but fears bringing shame on family; and
- ◆ the senior may fear a loss of status, friends, their independence or their home if they admit to substance use problems.

Family dynamics are problematic if there is elder abuse, either financial, physical, emotional or sexual.

Family and friends can be either barriers or resources. Families need to have their efforts acknowledged and supported. On the other hand, they may need to be made aware of how they may be inadvertently contributing to ongoing problem substance use.

Table 21: Key Experts: Interpersonal Barriers

Number of key experts who answered this question: 25	
Interpersonal Barriers	Number of Key Expert Responses
Lack of support by family	8
Enabling behaviours	6
Fear of reprisals	4
Elder abuse	4

c) Community or Cultural Barriers

Seniors who have problems with substance use may experience stigmatization from the community. They fear accessing treatment because it may mean being seen by others, inciting feelings of shame. The lack of resources in rural areas may force seniors to leave their community to access treatment. When transportation is unavailable or inaccessible except through a friend or family member, it may mean divulging their problem.

In rural areas, there are additional threats to confidentiality. The counsellor may be well known to the senior. Certain key experts remarked that in some areas health services are all in one location, with addiction services being in the same building as other health related services, making confidential access to addiction services extremely difficult.

Certain cultural myths may justify leaving seniors alone to use substances by reasoning that it is their only pleasure and therefore all right for them. Different cultural norms may place different pressures on seniors. In areas where excessive alcohol use is normalized, the behaviour may be accepted even if problematic, while in cultures where alcohol use is absent, over sensitivity may result in perceiving minimal use as a problem. Some cultures value privacy and encourage family problems to be kept within the family. The discussion of feelings is often discouraged.

For some cultures, individual family difficulties should not be disclosed and are regarded as issues to be dealt with within the family context. From this perspective, the family cohesion and support are

important considerations in providing assistance to a person who is working through issues of substance use. On the other hand, there may be critical times when external support may be required to effectively address substance use problems. In some cultures, the caregiver will be expected to put the needs of others ahead of their own. In Aboriginal cultures, seniors often act as caregivers for grandchildren, and may be reluctant to leave their responsibilities to get help for their own problems.

Cultural differences between clients and clinicians may also pose barriers to treatment. Clinicians may be unaware of differences or expect clients to conform to the dominant culture. Key experts underlined the importance of having clinicians who demonstrate cultural sensitivity. Responsibility must be placed on clinicians to increase their own cultural sensitivity rather than having the client adjust to the work setting.

Education of the community, family, and health care staff must be pursued to increase awareness of seniors with substance use problems and decrease the associated stigma. Outreach is an option that helps reduce barriers related to stigma and transportation. Key experts caution that in some communities stigma will be difficult to eradicate. Some seniors may have to be encouraged to put the risks into perspective and be willing to be seen accessing services.

Table 22: Key Experts: Community or Cultural Barriers

Number of key experts who answered this question: 28	
Community or Cultural Barriers	Number of Key Expert Responses
Language	11
Distance to treatment	10
Stigma, lack of anonymity	9
Ageism	6
Cultural differences: priorities, values	6

d) Structural or Program Barriers

Key experts identified a lack of transportation as a barrier. Seniors on fixed income or with limited financial resources cannot always afford the costs associated with public or private transportation. Accessing transportation may also imply that they are seen accessing treatment services, thus increasing the associated stigma.

Another program barrier identified by key experts is the lack of age-specific programming. The content of mainstream programs may have limited relevancy to many seniors, as they often focus on issues related to health, family, and/or occupations. Mainstream programs usually also include younger adults who may use language that is unfamiliar to seniors or refer to a lifestyle that seniors cannot relate to.

Other mentioned barriers include insufficient resources and few options among treatment interventions. Service providers are sometimes isolated from each other, especially in rural communities, and may be unaware of other available services.

Outreach was suggested to address transportation and stigma issues. Outreach minimizes barriers associated with mobility and sensory deficits. Age-specific programs were recommended instead of mainstream programs, as they can adopt a more subtle approach to improve quality of life.

Table 23: Key Experts: Structural or Program Barriers

Number of key experts who answered this question: 24	
Structural or Program Barriers	Number of Key Expert Responses
Transportation	13
Mainstream/Age-specific programs	11
Insufficient resources, options	3
Isolation among professionals	2

3.2.7 Principles that Guide Treatment Processes

a) Client Intake and Engagement

Most key experts identified a client-centred approach as a best practice in facilitating client intake and engagement. Client-centred approaches for seniors are:

- ◆ unhurried;
- ◆ non-confrontational;
- ◆ non-threatening;
- ◆ tolerant of their clients' living conditions;
- ◆ respectful of the dignity of the client; and
- ◆ confident that seniors are valuable to society.

Client-centred approaches ensure acceptance of seniors regardless of their readiness to change. The goals of treatment are set by the client and include aging and health issues, without being exclusively focussed on substance use. Outreach was identified as a best practice as it allows a proper appreciation of the home environment during assessment and treatment processes.

Table 24: Key Experts: Principles that Guide Client Intake and Engagement

Number of key experts who answered this question: 25	
Principles that Guide Client Intake and Engagement	Number of Key Expert Responses
Client-centred	21
Not necessary to focus on substance use	9
Outreach	7

b) Program Design and Delivery

Best practice approaches identified by the key experts tended to reflect a holistic and harm reduction model of treatment. For such approaches clinicians must demonstrate openness to setting treatment goals that are adapted to the individual needs of their clients and that focus on quality of life in addition to substance use issues.

Senior specific programs were recommended with a focus on clients' needs such as using small groups and large print size. Services offered through outreach should include components that strengthen social supports.

Programs must improve linkages to form a comprehensive continuum of services ranging from elder focussed activities to hospital-based programs. Personnel should be aware of existing service options in their communities and their regions, and be trained in both substance

use and gerontology issues. It is important for staff to demonstrate the ability to work with resistant clients who are in the pre-contemplative stage of change.

Table 25: Key Experts: Principles that Guide Program Design and Delivery

Number of key experts who answered this question: 23	
Principles that Guide Program Design and Delivery	Number of Key Expert Responses
Harm reduction, holistic approach	14
Linkages and training among staff and services	11
Senior specific program	7
Outreach	5
Social supports	4

c) Program Duration and Frequency

Program duration and frequency should be individualized and guided by client need. Some seniors may require a slower approach and a longer term engagement. Services are frequently more intense at the beginning, gradually reducing in intensity with time, and should be sustained through support and follow-up. Key experts also noted the importance of clinicians remaining flexible and adaptable, and being willing to reschedule appointments when needed.

Table 26: Key Experts: Principles that Guide Program Duration and Frequency

Number of key experts who answered this question: 24	
Principles that Guide Program Duration and Frequency	Number of Key Expert Responses
Open ended, long-term engagement	12
Individualized	9
Flexibility	6

d) Client Participation and Retention

Client participation and retention increase when seniors feel their needs are being appropriately met by the service. The program must address life problems outside of substance use, including social and leisure activities relevant to seniors. Treatment strategies should respect the client’s right to self-determination regardless of use patterns or stage of change. The most effective programs also ensure aftercare and support groups that foster a sense of belonging.

Table 27: Key Experts: Principles that Guide Client Participation and Retention

Number of key experts who answered this question: 25	
Principles that Guide Client Participation and Retention	Number of Key Expert Responses
Accept their goals, meet their needs	14
Initiate follow-up	6
Support groups	3

3.2.8 Model Program Components

a) Model Program Components Addressing Physical Health

The role of the physician was identified as being central for effective service delivery, assessments and ongoing medical care. Key experts acknowledged the importance of having physicians who are sensitized to issues of substance use in seniors. Services need to increase awareness among physicians of how substance use and prescribed medications can interact with physical health and medical conditions. Respondents highlighted that model programs often have a consulting physician available who has experience with both geriatrics and substance use problems.

Several key experts indicated the importance of a multidisciplinary team approach, with case management services. Suggested team members included a nutritionist and an exercise trainer with access to exercise equipment. Other model services that were outlined included home detoxification services or designated beds for seniors in the local hospital detoxification facility.

Table 28: Key Experts: Model Program Components Addressing Physical Health

Number of key experts who answered this question: 25	
Model Program Components Addressing Physical Health	Number of Key Expert Responses
Physician	13
Team approach	9
Nutritionist	6
Exercise	5
Detoxification	4

b) Model Program Components Addressing Psychological Health

Key experts advised that model services must address personal and psychological issues. They emphasized the need for counselling services to target areas beyond substance use, such as depression, loneliness, suicidal ideation, anxiety and abuse. The importance of using multidisciplinary teams with experienced and well-trained personnel was noted. In addition, referrals must be available to such services as:

- ◆ psychologists;
- ◆ psychiatrists;
- ◆ specialists in dual diagnosis (mental health *and* substance use problems);
- ◆ spiritual care; and
- ◆ nutritionists.

Opportunities for exercise, social activities and connections to the community were also valued by respondents.

Table 29: Key Experts: Model Program Components Addressing Psychological Health

Number of key experts who answered this question: 23	
Model Program Components Addressing Psychological Health	Number of Key Expert Responses
Psychologists	13
Multidisciplinary team	8
Psychiatrists	5
Dual diagnosis	3
Spiritual care	3
Social opportunities	3
Exercise	2
Nutritional advice	2

c) Model Program Components Addressing Interpersonal Relationships

Family, caregivers and friends are often involved with seniors as a support network. Key experts recommended that such individuals be involved in the intervention offered to the senior, or that they also be eligible for counselling services. In many instances, family members and/or close friends need acknowledgement and support in their coping efforts and need to understand how they may be inadvertently contributing to the substance use. In some cases, the failing health of the senior and/or the caregiver may require a move, resulting in a need to address the changes in the interpersonal dynamics within a treatment context. Support groups for family and peers were also among some of the program strategies recommended by the key experts.

Table 30: Key Experts: Model Program Components Addressing Interpersonal Relationships

Number of key experts who answered this question: 23	
Model Program Components Addressing Interpersonal Relationships	Number of Key Expert Responses
Offer treatment services	15
Involve Peers/Family in senior's treatment	14
Peer/Family support groups	5

d) Model Program Components Addressing Social and Cultural Issues

Key experts recommended the use of peer helpers to overcome treatment obstacles related to cultural differences. Through collaboration and networking with peer helpers, service providers can assist them in supporting the senior.

It is important to provide treatment services that respect and appreciate cultural differences. In the case of First Nations peoples, the principle of elder respect must be recognized, thereby ensuring services do not create embarrassment. Certain key experts also suggested buddy systems where seniors of similar backgrounds are a support system for each other. Outreach was also suggested as an effective method to ensure sensitivity to cultural issues.

Many key experts emphasized the importance of education and awareness to better understand cultural issues.

Table 31: Key Experts: Model Program Components Addressing Social and Cultural Issues

Number of key experts who answered this question: 24	
Model Program Components Addressing Social and Cultural Issues	Number of Key Expert Responses
Involve peers from senior's culture	6
Education	5
Appreciate cultural differences	4
Outreach	3

3.2.9 Aftercare

a) Challenges to Maintaining Treatment Gains

The most frequent challenge to maintaining treatment gains is a return to the circumstances, patterns, or situations that contributed to the substance use. Seniors risk:

- ◆ having continued access to the substance of their choice;
- ◆ returning to the same doctor who was over-prescribing;
- ◆ being in a milieu that encourages substance use; and
- ◆ being faced with isolation.

If social networks are based on problematic substance use, seniors may face the difficult task of developing new social networks. To overcome such challenges, key experts recommended the establishment of social supports through follow-up programs. Seniors must feel welcome in accessing group supports while transportation needs should be anticipated and met.

Seniors often face the loss of their health, mobility, driver’s licence or independence, hearing and sight, and loved ones. Clients may still be experiencing physical pain in instances where the substance use was related to pain killers. New coping mechanisms and relapse prevention strategies must be developed and integrated. Education components should be in place to teach clients and their caregivers that relapse is likely, problems do not end after treatment, recovery is a continuing process, and maintenance is an integral part of treatment.

Table 32: Key Experts: Challenges to Maintaining Treatment Gains

Number of key experts who answered this question: 25	
Challenges to Maintaining Treatment Gains	Number of Key Expert Responses
Return to old patterns or situations	14
Need social supports	13
Face impending losses	10
Transportation/mobility	8
Need new coping mechanisms	4
Need education on the addiction process	3

b) Development and Implementation of Relapse Prevention Programs

Key experts highlight the need for community supports as a key part of maintaining treatment gains. These supports can take various forms, including senior led support groups, Meals on Wheels, church involvement, or outreach visits. Of prime importance is the avoidance of a return to isolation.

Services must take the initiative in contacting clients rather than leaving follow-up to them. Counsellors should be available and easily accessible, so that with one phone call seniors can be reconnected to their supports. Use of a consistent counsellor throughout treatment

and follow-up is helpful. Services must strive to identify potential factors that may trigger a relapse to problematic use, and prepare a response to those factors.

Several key experts suggested that the idea of relapse should be revisited. Relapses are often considered a natural part of achieving reductions in use, and some respondents advocated the need to normalize relapse for clients, families, and communities through proper education. The term “relapse” may also suggest an abstinence approach, which for many is inconsistent with the harm reduction philosophy.

Table 33: Key Experts: Development and Implementation of Relapse Prevention Programs

Number of key experts who answered this question: 24	
Development and Implementation of Relapse Prevention Programs	Number of Key Expert Responses
Community or social supports	11
Accessible counsellors	10
Counsellor initiated follow-up contacts	8
Identify triggers to relapses	7
Change our concepts around relapse	5

c) Necessary Post-treatment Supports

Key experts highlighted the importance of establishing and maintaining social supports to reduce isolation and help secure treatment gains. Most effective strategies ensure that seniors take part in activities that provide a sense of involvement. Social supports may take the form of self-help groups, family members or friends. Social support groups that focus on abstinence from substance use may also be used as a supportive post-treatment intervention.

Counselling services must be accessible, either through help lines or through an open door policy. Back-up plans must be established in the event of any crises. Finally, families should be kept up-to-date regarding what is happening, bearing in mind confidentiality, and have access to needed supports.

Many key experts stressed the importance of medical monitoring, as physicians must be made aware of the senior’s substance use risks. In addition, home care and in-home services should be made available.

Table 34: Key Experts: Necessary Post-treatment Supports

Number of key experts who answered this question: 24	
Necessary Post-treatment Supports	Number of Key Expert Responses
Social supports	17
Easy access to follow-up counselling	14
Medical monitoring	11
Family supports	6

3.2.10 Measuring Effectiveness

a) Current Evaluation Processes

Key experts reported that treatment programs are most often informally evaluated. This usually involves anecdotal evidence of effectiveness by measuring client satisfaction and evaluating client comments on the various aspects of the program. Some services have gathered outcome measures such as statistics on level of use, recidivism, discharge, and measures of quality of life. Others rely on length of abstinence to evaluate the effectiveness of their service or programs.

Table 35: Key Experts: Effectiveness Measurements

Number of key experts who answered this question: 21	
Effectiveness Measurements	Number of Key Expert Responses
Informal, narrative measures	15
Outcome monitoring	6
Length of abstinence	2

b) Consideration of Outcome Variables or Indicators

Some key experts recommended using outcome indicators that measure changes in substance use patterns. Quality of life measures were identified by key experts as some of the most valid indicators of program success. These measures may include the extent to which clients have:

- ◆ maintained their treatment goals;

- ◆ maintained social relationships and activities;
- ◆ achieved independence or maintained self-care; and
- ◆ shown improvement in key life areas.

Table 36: Key Experts: Outcome Variables or Indicators

Number of key experts who answered this question: 22	
Outcome Variables or Indicators	Number of Key Expert Responses
Quality of life	15
Reduction of substance use	10
Satisfaction with services	8

c) Steps to Enhance Evaluation Efforts

Several key experts recommended longitudinal or pre-post comparative studies, while others recommended the use of qualitative measures such as narratives, thus accepting clients' subjective interpretations of service effectiveness. Efforts to evaluate program effectiveness could be significantly improved by re-directing resources toward implementation of proper evaluation processes. Key experts indicated a need for more information and best practice protocols on seniors with substance use problems. Service providers are often concerned with issues related to direct service delivery but are uncomfortable with conducting evaluations of service provision. The lack of standardized tools that are senior specific was also noted by certain key experts as impeding evaluation effectiveness.

Table 37: Key Experts: Steps to Enhance Evaluation Efforts

Number of key experts who answered this question: 21	
Steps to Enhance Evaluation Efforts	Number of Key Expert Responses
Background literature	5
Qualitative measures	3
Apply pre-post designs	4
Develop standardized tools	4

4. Best Practices

The best practice statements are based on a synthesis of the review of literature and documented expertise provided by the key experts. A wide range of issues were considered regarding access to, and provision of, services to seniors. In many cases, a general consensus was evident as to the central components that underlie optimal treatment and rehabilitation services. These statements reflect important implications to be considered in the provision of treatment for seniors. As research continues these statements will need to be revised and modified to reflect new and additional insights into the needs of seniors and evidence-based practices. The best practice statements follow the order in which the issues were addressed in the document.

Best Practice 1: Prescription and Over-the-counter Medications

Seniors can reduce potential harm to their health by ensuring that their physicians and pharmacists are informed of all medications and substances being used, including prescription drugs, regardless of who prescribed them or how they were obtained, over-the-counter medications, herbal remedies, alcohol or illicit drugs. In some instances, adverse medication reactions may resemble substance use problems, but appropriate monitoring of medications can help differentiate the cause of the symptoms.

Best Practice 2: Prescribing Practices

Prescribing practices must be monitored. Dosage requirements and medications need to be properly addressed.

Best Practice 3: Medication Compliance

Providers of services to seniors must ensure instructions for taking medications are explicit and understood. It may be difficult to recall verbal instructions given in the physician's office. In addition, potential declines in hearing, small fonts on labels, and terminology used in instructions may interfere with communication regarding use of medication.

Best Practice 4: Illicit Drugs

The use of illicit drugs among seniors is currently not considered to be a major issue. Problems in the future may arise as baby boomers become seniors. They will likely bring with them different experiences with marijuana, cocaine, heroin and illicitly purchased prescription medications. These changes should be anticipated and planned for accordingly.

Best Practice 5: Losses as Risk Factors

Isolation and multiple losses (i.e. loss of family, health, independence, roles and social networks) are associated with problem substance use among seniors. In addition, ongoing losses may pose challenges to pursuing treatment and maintaining treatment gains.

Best Practice 6: Screening and Diagnosis

Professionals working with seniors should receive training on screening for substance use problems. Personnel working with seniors in areas unrelated to substance use should be offered training in substance use screening and assessment skills to help them recognize the need for services. Trained service providers need to share their knowledge with family members and clients.

Best Practice 7: Education and Training: Professionals

Educational programs for treatment professionals should include senior-specific training components. Within substance use treatment programs, it is important to have appropriately trained personnel and training should include content relevant to substance use and gerontology.

Best Practice 8: Education and Training: Public

Increased public education and awareness is needed, and initiatives must be senior-specific rather than generic to all adults.

Best Practice 9: Awareness of Services

Awareness of treatment services for seniors should be enhanced. Community and workplace educational sessions provide a forum for information to be obtained regarding substance use and treatment services.

Best Practice 10: Engagement

Engagement may take time. A non-threatening and unhurried approach helps establish the rapport. It is important for service providers to remain flexible and adaptable, and be willing to reschedule appointments or to meet in the home.

Best Practice 11: Assessment

Assessments should not focus only on substance use, but should be comprehensive and include physical and psychological health, social activities, interpersonal relationships, the physical environment, and the strengths of seniors.

Best Practice 12: Treatment Issues: Client-centred

Effective treatment for seniors employs a client-centred approach. Client-centred approaches emphasize reducing the harm of substance use and improving quality of life. Seniors are encouraged to set the pace, goals, and direction of treatment.

Best Practice 13: Treatment Issues: Social Roles

In conjunction with treatment efforts, opportunities for seniors to fulfil social roles or resume responsibilities have benefits. For example, peer-led self-help groups foster hope, social relationships and a sense of purpose.

Best Practice 14: Treatment Issues: Family and Peers

Peers and family should be involved in the interventions offered to seniors, and should be eligible for counselling services. Peers and family members need acknowledgement and support in their coping efforts, and need to understand when they may be inadvertently contributing to the substance use. Establishment and use of support groups for family and peers are useful program strategies.

Best Practice 15: Treatment Issues: Daily Living

Basic living needs, such as housing, nutrition or access to medical services, must be addressed as part of a comprehensive treatment plan.

Best Practice 16: Treatment Issues: Socio-Cultural Differences

Service providers need to be aware of the socio-cultural environment. Peer helpers can help to overcome treatment obstacles related to socio-cultural differences when appropriate.

Best Practice 17: Treatment Issues: Collaboration and Communication

Collaboration and communication among professionals and agencies are critical components of service delivery. Community partnerships enhance the awareness of both clients and case managers regarding the availability of services and how they may be accessed. Partnerships also provide the basis for increased coordination of services and the development of a continuum of care for seniors. The links and partnerships that are forged will be unique to each community, and determined by community needs and resources.

Best Practice 18: Treatment Approaches: Outreach

Office visits or residential components may deter some seniors from seeking services. Outreach services facilitate participation in assessment and treatment planning activities and help build rapport.

Best Practice 19: Treatment Approaches: Transportation

Transportation is an important complement to service delivery. In cases where outreach services are not available, the provision of transportation is a minimum requirement.

Best Practice 20: Treatment Approaches: Harm Reduction

Some seniors may be more receptive to harm reduction approaches, for example if abstinence-based treatment has not been successful. From this perspective, emphasis is placed on reducing harms resulting from problem substance use, and relapse is seen as part of the recovery process.

Best Practice 21: Treatment Approaches: Age-specific Interventions

Seniors benefit from age-specific interventions. Age-specific programming addresses lifestyle issues, the social context, personal concerns, health issues, and creates a new social support network.

Best Practice 22: Treatment Approaches: Tailoring to Individual Needs

Tailoring strategies to individual needs requires integration of various treatment approaches. Those experiencing mild or moderate difficulties with alcohol use comprise the majority of users. For these individuals, full treatment is not warranted, but brief interventions can be effective. These methods are also effective for late-onset problem users. Cognitive-behavioural therapy is also indicated for seniors.

Best Practice 23: Measuring Effectiveness

Efforts to evaluate treatment program effectiveness would be improved by regular budgetary resources allocated for ongoing evaluation processes. Consultation with qualified research experts is important in the development of an evaluation program component.

5. Inventory of Specialized Programs

The objective of the inventory is to describe programs and specialized services presently available to seniors with substance use problems. There are approximately 180 mainstream programs in Canada that offer services to the general adult population, including seniors. These are listed in a database of treatment services, searchable through the Canadian Centre on Substance Abuse (CCSA) website (www.ccsa.ca).

The programs outlined in this document focus on programs solely for seniors with substance use problems. The names of senior specific programs were obtained through 1) the review of literature 2) the ADTR Working Group 3) the key experts and 4) the CCSA website.

Key personnel in each program were contacted and asked to provide a profile by completing a survey questionnaire that focussed on:

- ◆ organization coordinates;
- ◆ treatment orientation;
- ◆ geographic area served;
- ◆ referral sources;
- ◆ criteria for service (inclusion and exclusion);
- ◆ profile of clients served;
- ◆ treatment interventions;
- ◆ associated program supports;
- ◆ staff membership;
- ◆ staff training;
- ◆ key resources;
- ◆ other services referred to;
- ◆ key partnerships;
- ◆ cost to run program (approximate);
- ◆ ongoing monitoring or evaluation activities; and
- ◆ reports or evaluation.

The organizations approved their completed profile for publication in this document. This inventory of programs, listed by province from west to east, includes:

British Columbia:

- ◆ Elderly Services Program
- ◆ Seniors Liaison Program
- ◆ Seniors' Substance Awareness Program
- ◆ Seniors Well Aware Program (SWAP)
- ◆ Victoria Innovative Seniors' Treatment and Assessment Program (VISTA)

Alberta:

- ◆ Substance Abuse in Later Life (SAILL)

Manitoba:

- ◆ Substance Use Management, Intervention and Treatment (SUMIT)

Ontario:

- ◆ Community Outreach Program in Addictions – (COPA)
- ◆ Lifestyle Enrichment for Senior Adults (LESA)
- ◆ Older Persons Unique Solutions (OPUS-55)
- ◆ St Joseph's Care Group

Quebec

- ◆ Groupe Harmonie

Program Name: Elderly Services Program

Address:

Mental Health Centre
1444 Edmonton Street
Prince George, British Columbia V2M 6W5

Phone:

(250) 565-7408

Fax:

(250) 565-7416

Contact Person:

Louise Holland

Organization:

Government

Treatment Orientation:

Outreach, holistic, client-centred, harm reduction approach that does not focus on demanding abstinence.

Geographic Area Served:

Clinical services to Prince George, consultation and education to greater regions.

Referral Sources:

General practitioners, continuing care, detoxification facility.

Inclusion Criteria for Service:

Age 55 and over with a substance use problem.

Exclusion Criteria for Service:

Age 54 and under, or someone with severe dementia.

Profile of Clients Served:

Average age: in their 70's
Predominant substance(s): alcohol, prescription drugs.
Gender ratio: M/F 80/20

Treatment Interventions:

Case management
Multidisciplinary case conferencing
Assessment (In facility and via outreach)
Individual therapy (Via outreach)
Education (In facility and via outreach)
Aftercare/maintenance: contact client at intervals

Associated Program Supports:

Supportive housing

Medical care

Residential care

Other:

As part of supportive housing, clients are provided with financial management, transportation for grocery shopping, medication prompting, medical care, a meal program, and recreation. Supportive housing has a program fee that covers rent, food and miscellaneous costs.

Number of Full Time Equivalent Staff: 0.5

Social worker/outreach worker: 0.5

Background or Experience of Specialist for Seniors with Substance Use Problems:

The worker has trained with Victoria Innovative Seniors' Treatment and Assessment Program and has experience in gerontology.

Training Opportunities for Staff:

Peer education

Informal or on-the-job training

Consultation with outside experts

Specific training areas: e.g., adult guardianship law

Other:

Supportive housing staff are trained in areas of gerontology, alcohol use, how aging affects metabolism, harm reduction approach, and working without labels.

Key Resources:

"Alternatives: Prevention and Intervention for Alcohol and Drug Problems in Seniors" developed by Community Outreach Program in Addictions and Lifestyle Enrichment for Senior Adults – A handbook called "Choosing to Change".

Other Services Referred to:

Long-term care services, seniors housing, public trustee, emergency shelter, Ministry of Human Resources (Income Assistance).

Key Partnerships:

Older Persons and Alcohol List (OPAAL) network, Elderly Services Program, mental health, physicians, long term care facilities.

Approximate Cost to Run Program:

Not specified

Ongoing Monitoring or Evaluation Activities:

Not specified

Reports or Evaluations:

Not specified

Program Name: Seniors Liaison Program

Address:

Abbotsford Community Services
2420 Montrose Avenue
Abbotsford, British Columbia V2S 3S9

Phone:

(604) 870-3762

Fax:

(604) 859-6334

Contact Person:

Sharon Elliott

Organization:

Non-profit

Web Site:

www.abbotsfordcommunityservices.com

Treatment Orientation:

To provide services in the community to seniors who have problems arising from alcohol or drugs, (especially prescription drugs) and the combination of the two.

To be actively involved in the development and delivery of alcohol and drug education and early intervention.

Geographic Area Served:

City of Abbotsford and outlying regions

Referral Sources:

Continuing care, mental health, hospital acute care, psychiatric wards, home support, family, friends, and relatives.

Inclusion Criteria for Service:

Age 55 and over with substance use problems, or co-dependence of someone with substance use problems or family concerned about a parent with substance use problems.

Exclusion Criteria for Service:

Age 54 and under

Profile of Clients Served:

Average age: in their 70's
Predominant substance(s): primarily alcohol, also prescription drugs
Gender ratio: M/F 60/40

Treatment Interventions:

Case management
Multidisciplinary case conferencing
Assessment (In facility and via outreach)
Individual therapy (In facility and via outreach)
Family therapy (In facility)
Education (Via outreach)
Aftercare/maintenance: contact client at intervals
Consultation with physician about prescriptions for client.

Associated Program Supports:

The following are accessible: Meals on Wheels, caregiver support program, peer counselling, dining program.

Number of Full Time Equivalent Staff: 0.7

Management: 0.1

Clinician/therapist: 0.6

Background or Experience of Specialist for Seniors with Substance Use Problems:

Substance use counselling certificate (one-year program).

Training Opportunities for Staff:

Consultation with outside experts

Key Resources:

None specified

Other Services Referred to:

Continuing care, mental health, hospital acute care, psychiatric wards, home support, family, friends, and relatives.

Key Partnerships:

Sponsors: Ministry of Health Services, Fraser Health Authority.
Community partners: continuing care, case managers, mental health, acute care (Enhanced Care Team), Meals on Wheels, "Lunch with the Bunch" dining program, Abbotsford Peer Counselling and Friendly Visitor Program.

Approximate Cost to Run Program:

\$48 000

Ongoing Monitoring or Evaluation Activities:

Statistical information and a statement of activities.

Reports or Evaluations:

None available

Program Name: Seniors' Substance Awareness Program

Address:

104 – 1790 152nd Street
Surrey, British Columbia V4A 4N3

Phone:

(604) 535-4526

Fax:

(604) 535-4545

Contact Person:

Marj Nelson

Organisation:

Non-profit

Treatment Orientation:

To achieve a healthier society by reducing the misuse of alcohol/drugs and the effects of addictions. This includes playing a role in primary, secondary and tertiary prevention and, where appropriate, this also includes harm reduction.

Geographic Area Served:

South Fraser Health Region

Referral Sources:

Hospitals, physicians (indirectly), families, social workers, mental health, self-referrals, other alcohol and drug treatment programs, detox, nursing homes, friends.

Inclusion Criteria for Service:

Age 55 and over with a substance use problem, and/or family members, friends, and/or individuals, regardless of age, who are concerned about a senior who may have an alcohol/drug problem. The program will accept clients below age 55, depending on their circumstances.

Exclusion Criteria for Service:

No criteria

Profile of Clients Served:

Average age: age 55-65
Predominant substance(s): alcohol, and infrequently, prescription drugs
Gender ratio: M/F 40/60 (currently, this does change)

Treatment Interventions:

Case management
Multidisciplinary case conferencing
Assessment (In facility and via outreach)
Individual therapy (In facility and via outreach)
Family therapy (In facility and via outreach)
Education (In facility and via outreach)
Support groups – clinician facilitated
Aftercare/maintenance: contact client at intervals.

Associated Program Supports:

The system of care is linked to Alcohol and Drug Services B.C., which includes out-patient and outreach, treatment facilities, and supportive recovery.

Number of Full Time Equivalent Staff: 0.6
Management: 0.1
Clinician/therapist: 0.5

Background or Experience of Specialist for Seniors with Substance Use Problems:

RN, Masters (Psychology); Alcohol and Drug Services Clinical Practice; Addiction Counselling Training.

Training Opportunities for Staff:

Seminars/video conference
Informal or on-the-job training
Specific training areas: examples: alcohol and the family, seniors and the law.

Key Resources:

Provincial Alcohol and Drug Services: Standards and Policy Manual.

Other Services Referred to:

Detoxification, other alcohol and drug treatment programs, Alcoholics Anonymous, Al-Anon, mental health.

Key Partnerships:

Hospitals, Surrey Mental Health, Langley Family Services, Maple Cottage Detox, Alcohol and Drug Services B.C., Peace Arch Community Services – Addiction Services.

Approximate Cost to Run Program:

\$45 000

Ongoing Monitoring or Evaluation Activities:

Follow-up by phone or by a personal meeting

Reports or Evaluations:

None available

Program Name: Seniors Well Aware Program (SWAP)

Address:

411 Dunsmuir Street, 3rd Floor
Vancouver, British Columbia V6B 1X4

Phone:

(604) 987-7927

Fax:

(604) 669-8294

Contact Person:

Denise Bradshaw

Website:

www.swapbc.ca

Organisation:

Non-profit

Treatment Orientation:

None specified

Geographic Area Served:

Vancouver, Burnaby, New Westminster

Referral Sources:

Open

Inclusion Criteria for Service:

Age 55 and over

Exclusion Criteria for Service:

None specified

Profile of Clients Served:

Average age: 73
Predominant substance(s): alcohol, benzodiazepines, over-the-counter drugs
Gender ratio: M/F 60/40

Treatment Interventions:

Case management
Multidisciplinary case conferencing
Assessment. (In facility and via outreach)
Individual therapy. (In facility)
Withdrawal Management (detox) (In facility and via outreach)
Individual counselling. (In facility and via outreach)
Family support (Via outreach)
Education (In facility and via outreach)
Support groups – clinician facilitated; peer facilitated

Aftercare/maintenance: contact client at intervals
Theatre group
Social events

Associated Program Supports:

Supportive housing
Transportation
Medical care
Residential care

Number of Full Time Equivalent Staff: Not specified

Management:	1.0
Clinician/therapist:	1.0
Physician:	2.0 sessional
Nurse/nurse practitioner:	2.6
Social workers:	Not specified

Background or Experience of Specialist for Seniors with Substance Use Problems:

Not specified

Specialized Training for Staff:

Peer education
Seminars/video conference
Informal or on-the-job training
Consultation with outside experts
Specific training areas: geriatric medicine, geriatric mental health, community development.

Key Resources:

Alcohol Use Does Not Stop at Your Door; Barriers to Treatment for Older Adults

Other Services Referred to:

Variety of services

Key Partnerships:

Simon Fraser University – Gerontology Department
Vancouver Coastal Health Authority: Community Health Services
Fraser Health Authority: Geriatric Mental Health
BC Housing Health Services Program
Senior’s community centres

Approximate Cost to Run Program:

Not specified

Ongoing Monitoring or Evaluation Activities:

Not specified

Reports or Evaluations:

Not specified

Program Name: Victoria Innovative Seniors'
Treatment and Assessment Program (VISTA)

Address:

2828 Nanaimo Street
Victoria, British Columbia V8T 4W9

Phone:

(250) 953-3966

Fax:

(250) 356-9342

Contact Person:

Heather Cook, Manager Geriatric Psychiatry Programs

Organization:

Government: Regional Health Authority

Treatment Orientation:

VISTA believes that physical, psychological, behavioural, environmental and spiritual factors interact in the experience of wellness. They recognise this to be particularly true for older people who may be caught in a web of age-related concerns which include the misuse of alcohol and/or prescription drugs, and elder abuse/neglect issues. VISTA supports a variety of therapeutic approaches that value individual differences, personal responsibility, and self-determination. Its objective is to work in partnership with other agencies to provide integrated services designed to meet the unique needs of seniors.

Geographic Area Served:

Victoria and surrounding region

Referral Sources:

Referral can be made by anyone, including family, individual, agencies, physicians.

Inclusion Criteria for Service:

Seniors with an addiction issue, over the age of 55 who require an outreach service.

Exclusion Criteria for Service:

Under age 55

Profile of Clients Served:

Average age: 73
Predominant substance(s): alcohol
Gender ratio: M/F 44/56

Treatment Interventions:

- Case management
- Multidisciplinary case conferencing
- Assessment (Via outreach)
- Withdrawal management (detox) (Via outreach)
- Individual therapy (Via outreach)
- Group therapy
- Education (Via outreach)
- Support groups – clinician facilitated; peer facilitated
- Aftercare/maintenance: contact client at intervals

Associated Program Supports:

- Residential care

Number of Full Time Equivalent Staff: 11

- Management: 1
- Administrative/support staff: 1
- Clinician/therapist: 7
- Physician/geriatrician: 1
- Nurse; nurse practitioner: 1
- Outreach workers – all clinicians, the nurse, and the physician (when required).

Background or Experience of Specialist for Seniors with Substance Use Problems:

- Not specified

Training Opportunities for Staff:

- Peer education
- Seminars/video conference
- Informal or on-the-job training
- Consultation with outside experts
- Training in the use of assessment instruments

Key Resources:

- Educational resources developed for Seniors groups and other health care providers.

Other Services Referred to:

- In-patient geriatric psychiatry programs, long term care, home support services, elderly outreach, Cool Aid, and day programs.

Key Partnerships:

Sponsors: Victoria Gerontology Association, Capital Health Region seniors health programs

Funding: Ministry of Health Continuing Care Programs, Capital Health Region

Community Partners: Capital Health Region, primary and community care programs, long term care, home nursing care, community rehabilitation, nutrition, quick response team, hospital liaison, acute care hospital staff, residential care facilities, home support agencies, Elderly Outreach Service, Oak Bay Lodge, Veterans Affairs Canada, Capital Region Housing, senior peer counsellors, Silver Threads Service.

Approximate Cost to Run Program:

\$430 000 per annum

Ongoing Monitoring or Evaluation Activities:

No formalized ongoing evaluative mechanisms

Reports or Evaluations:

None completed

Program Name: Substance Abuse in Later Life (SAILL)

Address:

Rockyview General Hospital
Seniors Health Acute Care Outpatient Department
7007-14th Street S.W., Calgary, Alberta T2V 1P9

Phone:

(403) 541-3441

Fax:

(403) 212-1230

Contact People:

Christine Saltuklaroglu; Linda Hutchings; Heather McHugh

Organization:

Government

Treatment Orientation:

The SAILL program's mission is to provide flexible treatment approaches designed to reduce the effects of later life substance abuse and improve mental, physical, social and spiritual quality of life. To achieve this mission, a philosophy of harm reduction is adopted which emphasises a goal of complete abstinence but also focuses of efforts to reduce substance misuse and minimise damaging effects whenever abstinence is not achieved.

Geographic Area Served:

Calgary Health Region

Referral Sources:

SAILL may receive referrals from families, home care workers, other physicians, in-patient referrals from Rockyview General Hospital or other hospitals, community agencies, social workers. Each referral must ultimately be accompanied by a referral from the family physician.

Inclusion Criteria for Service:

Age 60 and over with substance use problems.

Exclusion Criteria for Service:

No one who is in a long term care facility or who has a moderate-severe dementia problem, and no one with a severe hearing loss.

Profile of Clients Served:

Average age:	74 or 75
Predominant substance(s):	90% alcohol, some prescription drugs
Gender ratio:	M/F 35/65

Treatment Interventions:

Case management
Multidisciplinary case conferencing
Assessment (In facility and via outreach)
Individual therapy (In facility and via outreach)
Group therapy (In facility)
Family therapy (In facility)
Education. (In facility and via outreach)
Aftercare/maintenance: contact client at intervals and offer a social monthly support luncheon for former and new clients

Associated Program Supports:

Medical care

Number of Full Time Equivalent Staff: 1.5 until March of 2002

Clinician/therapist: 1.5 until March 2002
Psychologist: accessible if needed
Psychiatrist: accessible if needed
Physician: 1 is accessible
Nurse; nurse practitioner: 0.2 (included in clinicians, above)

Background or Experience of Specialist for Seniors with Substance Use Problems:

All have been to in-services and education sessions (.2 RN; .5 Masters in Social Work; .8 Recreational Therapists)

Training Opportunities for Staff:

Peer education
Informal or on-the-job training
Consultation with outside experts

Key Resources:

Practising Harm Reduction Psychotherapy (by Patt Denning);
Changing for Good (by Prochaska); Behavioural Couples Therapy for Alcoholism (by Rotunda & O'Farrell)

Alcohol Use Disorders Identification Test; Michigan Alcoholism Screening Test – Geriatric Version; Several handouts, exercises and videos through our educational group component.

Other Services Referred to:

Alberta Alcohol & Drug Abuse Commission, Alcoholics Anonymous, facilities with programs for detoxification.

Key Partnerships:

Older Persons and Alcohol List (OPAAL) network, Alberta Alcohol and Drug Abuse Commission, Calgary Health Region seniors health geriatric consultation, and mental health services.

Approximate Cost to Run Program:

Not specified

Ongoing Monitoring or Evaluation Activities:

Not specified

Reports or Evaluations:

Not specified

Program Name: Substance Use Management,
Intervention and Treatment (SUMIT)

Address:

Seven Oaks General Hospital
2300 McPhillips Street
Winnipeg, Manitoba R2V 3M3

Phone:

(204) 632-3106

Fax:

(204) 632-8896

Contact People:

Maureen Boyce; Jill Overwater

Website:

www.sogh.winnipeg.mb.ca/rehab.html

Organization:

Government

Treatment Orientation:

An accessible program for people who are experiencing difficulty with their use of alcohol or other drugs, including prescription medications. SUMIT works to meet the needs of those people who have suffered as a result of chemical misuse. The program also tries to meet the needs of family and friends of these individuals.

Geographic Area Served:

Seven Oaks General Hospital community in North Winnipeg.

Referral Sources:

Family physicians, home care workers, families and individuals themselves, Addiction Foundation of Manitoba.

Inclusion Criteria for Service:

Age 55 and over and be willing to work toward abstinence or toward setting a goal of decreasing use of alcohol or other drugs over time.

Exclusion Criteria for Service:

Age 54 and under, and those outside the hospital catchment area.

Profile of Clients Served:

Average age: range 55 to 80
Predominant substance(s): alcohol, prescription drugs
Gender ratio: M/F 14/8

Treatment Interventions:

Case management
Assessment (In facility)
Withdrawal management (detox) (In facility)
Individual therapy (In facility)
Group therapy (In facility)
Education (In facility and via outreach)
Support groups – clinician facilitated
Support groups – peer facilitated
Aftercare/maintenance: contact client at intervals

Associated Program Supports:

Transportation

Number of Full Time Equivalent Staff: 0.1

Clinician/therapist: 0.1
Nurse; nurse practitioner: 0.1 (included in clinicians, above)

Background or Experience of Specialist for Seniors with Substance Use Problems:

Not specified

Training Opportunities for Staff:

Peer education
Seminars/video conference
Informal or on-the-job training
Consultation with outside experts
Specific training areas: e.g., courses at the Addiction Foundation of Manitoba

Key Resources:

Program pamphlet developed by staff

Other Services Referred to:

Addiction Foundation of Manitoba’s Christy House Family Program;
the Chemical Withdrawal Unit at the Health Science Centre.

Key Partnerships:

Seniors gambling consultant at the Addiction Foundation of Manitoba, triage nurse at Chemical Withdrawal Unit, the national health project “Seeking Solutions” network.

Approximate Cost to Run Program:

No program budget, staff are paid by another budget.

Ongoing Monitoring or Evaluation Activities:

None

Reports or Evaluations:

None available

Program Name: Community Outreach
Program in Addictions (COPA)

Address:

27 Roncesvalles Ave, Suite 407
Toronto, Ontario M6R 3B2

Phone:

(416) 516-2982

Fax:

(416) 516-2984

Contact Person:

Eileen M^cKee

Organization:

Non-profit

Treatment Orientation:

A community-based organization helping older persons and others in their community address alcohol and other drug problems through innovative and non-judgmental outreach programs.

Geographic Area Served:

Toronto

Referral Sources:

Public health, community care access centres, hospitals, victim services, court system, mental health courts, family, community services and agencies, general practitioner, nurses, care coordinators, subsidized senior housing, seniors' residences, taxis, police, probation and parole.

Inclusion Criteria for Service:

Age 55 or older, living between Humber River and Bathurst, south of Bloor, or able to get to one of COPA's four satellite offices.

Exclusion Criteria for Service:

Age 54 and under, or if they constitute a risk of violence.

Profile of Clients Served:

Average age: not specified
Predominant substance(s): alcohol, prescription medications
Gender ratio: M/F 2/1

Treatment Interventions:

Case management
Multidisciplinary case conferencing
Assessment (Via outreach)
Individual therapy (Via outreach)

Group therapy (Via outreach)
Family therapy (In facility)
Education (Via outreach)
Support groups – clinician facilitated
Aftercare/maintenance: contact client at intervals

Associated Program Supports:

Transportation assistance

Number of Full Time Equivalent Staff: 5.0

Management: 1
Administrative/support staff: 1
Outreach workers: 3

Background or Experience of Specialist for Seniors with Substance Use Problems:

Outreach workers are trained in gerontology, community work, addictions.

Training Opportunities for Staff:

Peer education
Seminars/video conference
Informal or on-the-job training
Specific training areas: e.g., brief intervention, elder abuse
Motivational interviewing
Counselling skills

Key Resources:

“Alternatives” package

Other Services Referred to:

Senior services that are in their area: Meals on Wheels, day hospital, community care access centres, regional geriatric program for psychiatric assessments in their home, physiotherapy, occupational therapy, any service that does home visits.

Key Partnerships:

Addiction Services, home visiting services, community and medical services, gerontology services.

Approximate Cost to Run Program:

Not specified

Ongoing Monitoring or Evaluation Activities:

Not specified

Reports or Evaluations:

Not specified

Program Name: Lifestyle Enrichment for Senior Adults (LESA)

Address:

Centretown Community Health Centre
420 Cooper Street
Ottawa, Ontario K2P 2N6

Phone:

(613) 233-5430

Fax:

(613) 233-2062

Contact Person:

Betty MacGregor

Organization:

Non-profit

Treatment Orientation:

Holistic, client-centred, harm reduction approach

Geographic Area Served:

Ottawa region

Referral Sources:

45% health care providers, 25% self and family, 20% other addiction agencies, 10% other

Inclusion Criteria for Service:

Age 55 and over

Exclusion Criteria for Service:

Age 54 and under

Profile of Clients Served:

Average age: range 55 to 96
Predominant substance(s): alcohol, prescription drugs
Gender ratio: M/F 50/50

Treatment Interventions:

Case management
Multidisciplinary case conferencing
Assessment (In facility and via outreach)
Withdrawal management (detox) (Via outreach)
Individual therapy (In facility and via outreach)
Group therapy (In facility and via outreach)
Family therapy (In facility and via outreach)
Education (In facility and via outreach)
Aftercare/maintenance: contact client at intervals
Social/recreational outings

Associated Program Supports:

Transportation

Number of Full Time Equivalent Staff: 5

Management: 1
Administrative/support staff: 1
Clinician/therapist: 3
Nurse; nurse practitioner: 1 of the 3 clinicians
Outreach workers: 3 of the 3 clinicians

Background or Experience of Specialist for Seniors with Substance Use Problems:

Nursing. Masters in Counselling. Masters in Social Work.

Training Opportunities for Staff:

Peer education
Seminars/video conference
Informal or on-the-job training
Consultation with outside experts

Workshops on care for the caregiver, on case management, and CPR training, also on concurrent disorders, geriatric nursing, violence/abuse.

Key Resources:

Two documents developed by Lifestyle Enrichment for Senior Adults, Community Outreach Program in Addictions, and Centre for Addiction and Mental Health called “Alternatives” and “Choosing to Change”. Also a research paper called “The Client Speaks” developed by Lifestyle Enrichment for Senior Adults and Centre for Addiction and Mental Health.

Other Services Referred to:

Other addiction agencies and geriatric services

Key Partnerships:

Psychogeriatric services, regional geriatric services, Council on Aging, Centre for Addiction and Mental Health, Health Department of Ottawa, other community health centres, hospitals, addiction agencies, community care access centres, Canadian Mental Health Association, seniors’ residences, long-term care facilities.

Approximate Cost to Run Program:

\$300 006

Ongoing Monitoring or Evaluation Activities:

Working with University of Ottawa to develop user-friendly tools to capture changes such as quality of life (emotional changes), isolation/loneliness, as well as “harms reduced” and the client’s readiness to change.

Reports or Evaluations:

“Participatory Research on Innovative Addictions Treatment for Older Adults: Clients of the LESA Program Describe What Makes a Difference” by P. West and K. Graham; and “A Harm Reduction Approach to Treating Older Adults: The Clients Speak” by K. Graham, P. J. Brett, and J. Baron.

Program Name: Older Persons Unique Solutions (OPUS-55)

Address:

Centre for Addiction and Mental Health
33 Russell Street
Toronto, Ontario M5S 2S1

Phone:

(416) 595 6128

Fax:

(416) 595-6619

Contact Person:

None specified.

Organisation:

Non-profit.

Treatment Orientation:

OPUS 55 adopts a harm reduction philosophy and provides client centred care through an eclectic mix of narrative therapy, solution-focussed therapy, cognitive therapy, behavioural change therapy.

Geographic Area Served:

Toronto

Referral Sources:

Clients must self-refer. If there are barriers such as language or culture or hearing problems, referrals can be facilitated by other people. Other referring people (family, home care providers) are encouraged to help the client self-refer.

Inclusion Criteria for Service:

Age 55 and over, with a substance misuse problem.

Exclusion Criteria for Service:

Age 54 and under

Profile of Clients Served:

Average age: 69
Predominant substance(s): alcohol, prescription drugs
Gender ratio: M/F 1/2

Treatment Interventions:

Case management
Multidisciplinary case conferencing
Assessment (In facility)
Individual therapy (In facility)

Group therapy (In facility)
Family therapy (In facility)
Education (In facility)

Associated Program Supports:

Supportive housing
Transportation
Residential care
Other: Withdrawal management is offered by Centre for Addiction and Mental Health

Number of Full Time Equivalent Staff: 1.0

Management: 0.4
Clinician/therapist: 0.6

Background or Experience of Specialist for Seniors with Substance Use Problems:

Clinician is a registered nurse and a social service worker with training in narrative therapy, solution-focussed therapy, cognitive therapy, and substance misuse.

Training Opportunities for Staff:

Seminars/video conference

Specific training areas: e.g., education on gerontology, geriatric psychiatry, and on seniors with substance misuse problems.

Key Resources:

Choosing to Change (handbook)
Video “Small Steps” in progress
Website in progress

Other Services Referred to:

Other programs within Centre for Addiction and Mental Health. Staff may help clients access physicians.

Key Partnerships:

Riverdale Hospital, Community Outreach Program in Addictions, Project Advisory Committee for “Seeking Solutions: Canadian Community Action for Seniors and Alcohol Abuse.

Approximate Cost to Run Program:

Not specified

Ongoing Monitoring or Evaluation Activities:

Not specified

Reports or Evaluations:

Not specified

Program Name: St. Joseph's Care Group –
Addiction Services – Older Adults Program

Address:

Sister Margaret Smith Centre
P.O. Box 3251, Station "P"
Thunder Bay, Ontario P7B 5G7

Phone:

(807) 343-2425

Fax:

(807) 343-9447

Contact Person:

Wendy Dolan

Organization:

Non-profit

Treatment Orientation:

Client-centred program that uses the harm reduction model. Clients choose their own goals, abstinence is not a necessary goal. The program pace is matched to the client, is skills-based and offers counselling.

Geographic Area Served:

Northwest Ontario region

Referral Sources:

Addiction assessment and referral network in Northern Ontario; physicians, self-referrals, agencies that have mandates to work with older adults.

Inclusion Criteria for Service:

That they be capable of functioning within the program. They should be an older adult, with older being defined by their presenting age rather than their chronological age.

Exclusion Criteria for Service:

A diagnosis of Korsakoff's syndrome or advanced dementia.

Profile of Clients Served:

Average age: mid 60s
Predominant substance(s): alcohol, prescription drugs
Gender ratio: In detox: more males than females.
In treatment: 50/50

Treatment Interventions:

Case management
Multidisciplinary case conferencing
Assessment (In facility and via outreach)
Withdrawal management (detox) (In facility and via outreach)
Individual therapy (In facility and via outreach)
Group therapy (In facility)
Family therapy (In facility)
Education (In facility and via outreach)
Support groups – clinician facilitated
Aftercare/maintenance: an ongoing, open ended group.

Associated Program Supports:

Transportation
Medical care
Residential care

Number of Full Time Equivalent Staff: 3

Clinician/therapist: 3
Physician: 1 once a week
Outreach workers: 3 of the 3 clinicians

Background or Experience of Specialist for Seniors with Substance Use Problems:

Courses in gerontology and training in the area of seniors with substance use problems.

Training Opportunities for Staff:

Peer education
Seminars/video conference
Informal or on-the-job training
Consultation with outside experts
Specific training areas: Gerontology course via teleconference;
training on community development.

Key Resources:

Developed an education and early intervention program package; and developed a training package for caregivers.

Other Services Referred to:

Older adults aftercare program if they are from the city of Thunder Bay, otherwise any alcohol and drug counselling programs in their outlying community. A discharge summary is sent to the physician if staff have the client's permission.

Key Partnerships:

National health project: Seeking Solutions; any community agencies who work with client groups.

Approximate Cost to Run Program:

Not specified

Ongoing Monitoring or Evaluation Activities:

Not specified

Reports or Evaluations:

Not specified

Program Name: Groupe Harmonie

Address:

1801, boul. de Maisonneuve Ouest, Suite 500
Montreal, Quebec H3H 1J9

Phone:

(514) 939-2640

Fax:

(514) 934-3776

Contact Person:

Lise Thérien

Website:

www.iquebec.ifrance.com/grharmonie/accueil.html

Organisation:

Non-profit

Treatment Orientation:

Come to the aid of people aged 55 and over, with medications, alcohol, or other drugs use problems.

Geographic Area Served:

Downtown Montreal – CLSC Metro, St-Henri, Petite Bourgonne,
Pointe St Charles

Referral Sources:

Self referral, physicians, social workers, hospitals

Inclusion Criteria for Service:

Aged 55 and over, not diagnosed with serious medical condition.

Exclusion Criteria for Service:

No severe mental health problems or suicidal tendencies.

Profile of Clients Served:

Average age:	70 years old for women, 68 years old for men (for in-home services) 59 years old for women and 62 years for men in brief therapy
Predominant substance(s):	Alcohol
Gender ratio:	M/F 50/50

Treatment Interventions:

Case management	
Multidisciplinary case conferencing	
Assessment	(In facility and via outreach)
Individual therapy	(In facility and via outreach)
Family therapy	(In facility and via outreach)

Education (via outreach)
Aftercare/maintenance: contact client at intervals
Other: Offers consultation and education to professionals, and in-home support services to clients and their families.

Associated Program Supports:

None

Number of Full Time Equivalent Staff: 2

Administrative/support staff: 1

Clinician/therapist: 1 (same as above)

Background or Experience of Specialist for Seniors with Substance Use Problems:

Not specified

Training Opportunities for Staff:

Seminars/video conference

Key Resources:

None specified.

Other Services Referred To:

Rehabilitation centres, mental health, drop-in centres, local doctors of the “*Centre locaux des services communautaires (CLSC)*” in the region of the client.

Key Partnerships:

None specified

Approximate Cost to Ru Program:

Not specified

Ongoing Monitoring or Evaluation Activities:

Not specified

Reports or Evaluations:

Not specified

6. Key Considerations

6.1 General Considerations

- ◆ For seniors, the substance use problems most frequently observed are with alcohol, but also prescription medications. Although illicit drugs are not currently a major problem for seniors, it is anticipated that problems with their use will emerge as baby boomers enter their senior years.
- ◆ Symptoms of substance use can resemble symptoms of chronic conditions. Both professionals and the general public need increased education on substance use issues.
- ◆ Early-onset drinkers comprise approximately two-thirds of senior problem drinkers, and late-onset drinkers comprise one-third. Early-onset drinkers tend to have fewer social supports than late-onset drinkers.
- ◆ Family, physicians and pharmacists should monitor medication use and be aware of concurrent use of alcohol and other prescription medication, over-the-counter medications, or herbal remedies.
- ◆ Instructions for prescription medications should be clear, taking into account potential declines in hearing, and difficulties reading small fonts on labels or understanding terminology.
- ◆ Seniors' risk factors include multiple losses, such as loss of health, independence and family or social network. These losses may contribute to social isolation and loneliness. The development of relationships and social networks are important aspects of treatment.
- ◆ Age-specific interventions are beneficial for seniors; at times a slower pace may be required.
- ◆ Brief interventions that promote awareness and encourage motivation to change are beneficial for seniors experiencing mild to moderate difficulties with alcohol use.
- ◆ Seniors benefit from outreach services that adopt a harm reduction, client-centred, holistic treatment approach that aims to improve overall quality of life.

6.2 Future Research Considerations

- ◆ In addition to the published research, many organizations conduct evaluations but only print them as working or planning documents. Similarly, government documents are not always cited in academic databases. Such “grey literature” is not always available to researchers or program planners in their consideration or planning of best practices. Treatment programs should ensure the development and formulation of adequate data gathering approaches, as well as a method to share and disseminate such information.
- ◆ There is an absence of a clear developmental theory specific to the area of seniors with substance use problems. Researchers and clinicians have applied or adapted the theoretical models from their respective fields of training to this area. Many key experts asserted the need for the development of a framework that takes into account the unique experiences of seniors and the factors that contribute to their substance use problems.
- ◆ Further research is needed to develop or modify standardized assessment tools. There are few standardized instruments specifically designed for use with seniors with substance use problems. The criteria employed by various measures for identifying problem substance use may need to be modified or adapted to more accurately reflect the situation and needs of seniors.
- ◆ Research is also needed in the pharmacological treatment of substance use problems in seniors. While research has identified various agents to help younger adults, these interventions have not been sufficiently tested on seniors to determine their potential efficacy.
- ◆ This literature review cannot be taken as a definitive analysis of the links between substance use problems and gerontology. The emphasis is on the substance use problems literature. However, it identifies several links that warrant further research (e.g., resilience)

6.3 Future Policy Considerations

- ◆ Service providers should receive training in both gerontology and substance use issues.
- ◆ Collaboration and communication among professionals helps to ensure integrated service delivery and contributes to a comprehensive continuum of care for seniors.

- ◆ Program evaluations conducted by qualified research personnel need to be included as part of a plan for service delivery.
- ◆ Best practice guidelines should be regularly reviewed as research in this area continues. As seniors are not a static population, the conclusions and recommendations made in this document will need to be adapted as changes occur within this population.

References

- Adams, W.L., Barry, K.L., & Fleming, M.F. (1996). Screening for problem drinking in older primary care patients. *Journal of the American Medical Association*, 276(24), 1964-1967.
- Adams, W.L., Magruder-Habib, K., Trued, S., & Broome, H.L. (1992). Alcohol abuse in elderly emergency department patients. *Journal of the American Geriatric Society*, 40(12),1236-1240.
- Adams, W.L., Zhong, Y., Barboriak, J.J., & Rimm, A.A. (1993). Alcohol-related hospitalizations of elderly people. *Journal of the American Medical Association*, 270(10), 1222-1225.
- Addictions Foundation of Manitoba (1995). *Seniors and Addiction, the Challenge to Professionals: Aging Without Addiction*. Winnipeg: Addictions Foundation of Manitoba.
- Addiction Research Foundation (1993a). *The Older Adult and Alcohol*. Toronto: Addiction Research Foundation.
- Addiction Research Foundation (1993b). *The Older Adult and Sleeping Pills, Tranquillizers and Pain Medication*. Toronto: Addiction Research Foundation.
- Allen, D.N., & Landis, R.K.B. (1997) Substance abuse in elderly individuals. In P.D. Nussbaum (Ed.) *Handbook of Neuropsychology and Aging. Critical Issues in Neuropsychology* (pp. 111-137). New York, NY: Plenum Press.
- American Psychiatric Association. (1994). *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.). Washington, DC: American Psychiatric Association.
- Anetzberger, G.J., & Korbin, J.E. (1994). Alcoholism and elder abuse. *Journal of Interpersonal Violence*, 9(2), 184-193.
- Atkinson, R.M. (1990). Aging and alcohol use disorders: Diagnostic issues in the elderly. *International Psychogeriatrics*, 2, 55-72.
- Atkinson, R.M., & Ganzini, L. (1994). Substance abuse. In E.C. Coffey & J.L. Cummings (Eds.), *Textbook of Geriatric Neuropsychiatry*. Washington, DC: American Psychiatric Press.

- Atkinson, R.M., Ganzini, L., & Bernstein, M.J. (1992). Alcohol and substance-use disorders in the elderly. In J.E. Birren, R.B. Sloane, & G.D. Cohen (Eds.), *Handbook of Mental Health and Aging, Second Edition* (pp 515-555). San Diego, CA: Academic Press.
- Banks, S.M., Pandiani, J.A., Schact, L.M., & Gauvin, L.M. (2000). Age and mortality among white, male problem drinkers. *Addiction*, 95(8), 1249-1254.
- Barnea, Z., & Teichman, M. (1994). Substance misuse and abuse among the elderly: Implications for social work intervention. *Journal of Gerontological Social Work*, 21(3/4), 133-148.
- Baron, J., & Carver, V. (1997). Substance abuse and older clients. In S. Harrison & V. Carver (Eds.) *Alcohol and Drug Problems: A Practical Guide for Counsellors* (pp. 271-291). Toronto: Addiction Research Foundation.
- Bergob, M. (1994). Drug use among senior Canadians. *Canadian Social Trends*, Summer, 25-29.
- Birk, D.M. (1996). Putting the gold back in the golden years. In J. Cautela & W. Ishaq (Eds.) *Contemporary Issues in Behavior Therapy: Improving the Human Condition* (pp. 383-399). New York, NY: Plenum Press.
- Blow, F., & Barry, K. (2000). Older patients with at-risk and problem drinking patterns: New developments in brief interventions. *Journal of Geriatric Psychiatry and Neurology*, 13(3), 115-123.
- Blow, F., Cook, C.L., Booth, B.M., Falcon, S.P. & Friedman, M.J. (1992). Age-related psychiatric comorbidities and level of functioning in alcoholic veterans seeking outpatient treatment. *Hospital Community Psychiatry*, 43(10), 990-995.
- Blow, F.C., Walton, M.A., Barry, K.L., Coyne, J.C., Mudd, S.A., & Copeland, L.A. (2000). The relationship between alcohol problems and health functioning of older adults in primary care settings. *Journal of the American Geriatrics Society*, 48(7), 769-774.
- Boggs, D.L., & Leptak, J. (1991). Life review among senior citizens as a product of drama. *Educational Gerontology*, 17, 239-246.
- Booth, B.M., Blow, F.C., Cook, C.A.L., Bunn, J.Y., & Fortney, J.C. (1992). Age and ethnicity among hospitalized alcoholics: A nationwide study. *Alcoholism: Clinical and Experimental Research*, 16(6), 1029-1034.

- Bortz, J.J., & O'Brien, K.P. (1997). Psychotherapy with older adults: Theoretical issues, empirical findings, and clinical applications. In P.D. Nussbaum (Ed.) *Handbook of Neuropsychology and Aging. Critical Issues in Neuropsychology* (pp. 431-451). New York, NY: Plenum Press.
- Bradley, K.A., Badrinath, S., Bush, K., Boyd-Wickizier, J., & Anawalt, B. (1998). Medical risks for women who drink alcohol. *Journal of General Internal Medicine*, 3, 627-639.
- Brennan, P.L., Kagay, C.R., Geppert, J.J., & Moos, R.H. (2000). Elderly medicare inpatients with substance use disorders: Characteristics and predictors of hospital readmissions over a four-year interval. *Journal of Studies on Alcohol*, 61(6), 891-895.
- Bristow, M.F., & Clare, A.W. (1992). Prevalence and characteristics of at-risk drinkers among elderly acute medical inpatients. *British Journal of Addiction*, 87, 291-294.
- Broe, G.A., Creasey, H., Jorm, A.F., Bennett, H.P., Casey, B., Waite, L.M., Grayson, D.A., & Cullen, J. (1998). Health habits and risk of cognitive impairment and dementia. *Australian and New Zealand Journal of Public Health*, 22, 621-623.
- Brower, K.J., Mudd, S., Blow, F.C., Young, J.P., & Hill, E.M. (1994). Severity and treatment of alcohol withdrawal in elderly versus younger patients. *Alcoholism: Clinical and Experimental Research*, 18(1), 196-201.
- Buchsbaum, D.G., Buchanan, R.G., Welsh, J., Centor, R.M., & Schnoll, S.H. (1992). Screening for drinking disorders in the elderly using the CAGE questionnaire. *Journal of the American Geriatrics Society*, 40, 662-665.
- Canadian Coalition on Medication Use and the Elderly (1992). *Ask/Demandez*. Ottawa: Canadian Coalition on Medication Use and the Elderly.
- Canada's Research-Based Pharmaceutical Companies (2000) *Knowledge is the Best Medicine: A Consumer Health Education Program on the Appropriate Use of Medication*. Ottawa: Canada's Research-Based Pharmaceutical Companies. <http://www.canadapharma.org>
- Carlen, P.L., McAndrews, M.P., Weiss, R.T., Dongier, M., Hill, J.M., Menzano, E., Farcnik, K., Abarbanel, J., & Eastwood, M.R. (1994). Alcohol-related dementia in the institutionalized elderly. *Alcoholism: Clinical and Experimental Research*, 18(6), 1330-1334.
- Closser, M.H. (1991). Benzodiazepines and the elderly: A review of potential problems. *Journal of Substance Abuse Treatment*, 8, 35-41.

- Colsher, P.L., & Wallace, R.B. (1990). Elderly men with histories of heavy drinking: Correlates and consequences. *Journal of Studies on Alcohol*, 51(6), 528-535.
- Coogle, C.L., Osgood, N.J., & Parham, I.A. (2000). A statewide model detection and prevention program for geriatric alcoholism and alcohol abuse: Increased knowledge among service providers. *Community Mental Health Journal*, 36(2), 137-148.
- Coogle, C.L., Osgood, N.J., Pyles, M.A., & Wood, H.E. (1995). The impact of alcoholism education on service providers, elders, and their family members. *Journal of Applied Gerontology*, 14(3), 321-332.
- Dalrymple, A.J., O'Doherty, J.J., & Nietschei, K.M. (1995). Comparative analysis of native admissions and registrations to northwestern Ontario treatment facilities: Hospital and community sectors. *Canadian Journal of Psychiatry*, 40, 467-473.
- Danzinger, P.R., & Welfel, E.R. (2000). Age, gender and health bias in counselors: An empirical analysis. *Journal of Mental Health Counseling*, 22(2), 135-149.
- Dufour, M., & Fuller, R.K. (1995). Alcohol in the elderly. *Annual Review of Medicine*, 46, 123-132.
- Fingerhood, M. (2000). Substance abuse in older people. *Journal of the American Geriatrics Society*, 48(8), 985-995.
- Finlayson, R.E., & Davis, L.J. (1994). Prescription drug dependence in the elderly population: Demographic and clinical features of 100 inpatients. *Mayo Clinic Proceedings*, 69(12), 1137-1145.
- Fitzgerald, J.L., & Mulford, H.A. (1992). Elderly vs younger problem drinker "treatment" and recovery experiences. *British Journal of Addiction*, 87, 1281-1291.
- Fleming, M.F., Manwell, L.B., Barry, K.L., Adams, W., & Stauffacher, E.A. (1999). Brief physician advice for alcohol problems in older adults: A randomized community-based trial. *Journal of Family Practice*, 48, 378-384.
- Fulop, G., Reinhardt, J., Strain, J.J., Paris, B., Miller, M., & Fillit, H. (1993). Identification of alcoholism and depression in a geriatric medicine outpatient clinic. *Journal of the American Geriatrics Society*, 41(7), 737-741.

- Gambert, S.R. (1997). Alcohol abuse: Medical effects of heavy drinking in late life. *Geriatrics*, 52(6), 30-37.
- Gander & District Continuing Care Program & The Seniors Resource Centre (1994). *Aging and the Use of Drugs*. Gander, NF: Gander and District Continuing Care Program.
- Ganry, O., Dubreuil, A., Joly, J.P., & Queval, M.P. (2000). Prevalence of alcohol problems among elderly patients in a university hospital. *Addiction*, 95(1), 107-113.
- Goldmeier, J. (1994). Intervention with elderly substance abusers in the workplace. *Families in Society*, 75(10), 624-629.
- Goldstein, M.Z., Pataki, A., & Webb, M.T. (1996). Alcoholism among elderly persons. *Psychiatric Services*, 47(9), 941-943.
- Gomberg, E.S. (1995). Older women and alcohol: Use and abuse. *Recent Developments in Alcoholism*, 12, 61-79.
- Gomberg, E.S.L., & Zucker, R.A. (1998). Substance use and abuse in old age. In I.H. Nordhus & G.R. VandenBos et al. (Eds). *Clinical Geropsychology* (pp. 189-204), Washington, DC: American Psychiatric Press.
- Graham, K., Brett, P.J., & Baron, J. (1994). A harm reduction approach to treating older adults: The clients speak. Paper presented at the Fifth International Conference on the Reduction of Drug Related Harm, Toronto, ON, March 7-10, 1994.
- Graham, K., Carver, V., & Brett, P.J. (1996). Women aged 65 and over: Alcohol and drug use. In M. Adrian, C. Lundy & M. Eliany (Eds.) *Women's Use of Alcohol, Tobacco and Other Drugs in Canada* (pp. 82-102). Toronto: Addiction Research Foundation.
- Graham, K., Clarke, D., Bois, C., Carver, V., Dolinki, L., Smythe, C., Harrison, S., Marshman, J., & Brett, P. (1996). Addictive behavior of older adults. *Addictive Behaviors*, 21(3), 331-348.
- Graham, K., & Schmidt, G. (1999). Alcohol use and psychosocial well-being among older adults. *Journal of Studies on Alcohol*, 60(3), 345-351.
- Graham, K., Zeidman, A., Flower, M.C., Saunders, S.J., & White-Campbell, M. (1992). A typology of elderly persons with alcohol problems. *Alcoholism Treatment Quarterly*, 9(3-4), 79-95.
- Gurnack, A.M., & Hoffman, N.G. (1992). Elderly alcohol misuse. *International Journal of the Addictions*, 27(7), 869-878.

- Hanson, B.S. (1994). Social network, social support and heavy drinking in elderly men – a population study of men born in 1914, Malmo, Sweden. *Addiction*, 89(6), 725-732.
- Health Canada (1998). *Canada's Drug Strategy*. Ottawa: Minister of Public Works and Government Services Canada, Cat. No. H39-440/1998E.
- Health Canada (1999a). *Best Practices – Substance Abuse Treatment and Rehabilitation*. Ottawa: Minister of Public Works and Government Services Canada, Cat. No. H39-438/1998E.
- Health Canada (1999b). *Statistical Report on the Health of Canadians*. www.hc-sc.gc.ca/hppb/phdd/report/text_versions/english/stat/index.html.
- Health Canada (2000). *Cocaine Use – Recommendations in Treatment and Rehabilitation*. Ottawa: Minister of Public Works and Government Services Canada, Cat. No. H49-155/2001E.
- Health Canada (2001a). *Best Practices – Fetal Alcohol Syndrome/Fetal Alcohol Effects and the Effects of Other Substance Use During Pregnancy*. Ottawa: Minister of Public Works and Government Services Canada, Cat. No. H49-156/2001E.
- Health Canada (2001b). *Best Practices – Treatment and Rehabilitation for Women with Substance Use Problems*. Ottawa: Minister of Public Works and Government Services Canada, Cat. No. H49-153/2001E.
- Health Canada (2001c). *Best Practices – Treatment and Rehabilitation for Youth with Substance Use Problems*. Ottawa: Minister of Public Works and Government Services Canada, Cat. No. H49-154/2001E.
- Holroyd, S., & Duryee, J.J. (1997). Substance use disorders in a geriatric psychiatry outpatient clinic: Prevalence and epidemiologic characteristics. *The Journal of Nervous and Mental Disease*, 185(10), 627-632.
- Indian and Northern Affairs Canada (2000). *Social development: Health and social indicators*. (http://www.ainc-inac.gc.ca/gs/soci_e.html)
- Kaempf, G., O'Donnell, C., & Oslin, D.W. (1999). The BRENDA model: A psychosocial addiction model to identify and treat alcohol disorders in elders. *Geriatric Nursing* 20(6), 302-304.
- Kashner, T.M., Rodell, D.E., Ogden, S.R., Guggenheim, F.G., & Karson, C.N. (1992). Outcomes and costs of two VA inpatient treatment programs for older alcoholic patients. *Hospital and Community Psychiatry*, 43, 985-989.

- King, C.J., Van Hasselt, V .B., Segal, D.L., & Hersen, M. (1994). Diagnosis and assessment of substance abuse in older adults: Current strategies and issues. *Addictive Behaviors*, 19(1), 41-55.
- Klatsky, A.L., Armstrong, M.A., & Friedman, G.D. (1990). Risk of cardiovascular mortality in alcoholic drinkers, ex-drinkers and nondrinkers. *American Journal of Cardiology*, 66, 1237-1242.
- Kostyk, D., Lindblom, L., Fuchs, D., Tabisz, E., & Jacyk, W.R. (1994). Chemical dependency in the elderly: Treatment phase. *Journal of Gerontological Social Work*, 22(1-2),175-191.
- Kraemar, K.L., Mayo-Smith, M.F., & Calkins, D.R. (1997). Impact of age on the severity, course and complications of alcohol withdrawal. *Archives of Internal Medicine*, 157(19), 2234-2241.
- Krause, N. (1995). Stress, alcohol use, and depressive symptoms in later life. *The Gerontologist*, 35(3), 296-307.
- Larkin, J.P., & Seltzer, B. (1994). Alcohol abuse and Alzheimer's disease. *Hospital and Community Psychiatry*, 45(10), Special Issue, 1040-1041.
- Liberto, J.G., Oslin, D.W., & Ruskin, P.E. (1992). Alcoholism in older persons: A review of the literature. *Hospital and Community Psychiatry*, 43(10), 975-984.
- Lucey, M.R., Hill, E.M., Young, J.P., Demo-Dananberg, L., & Beresford, T.P. (1999). The influences of age and gender on blood ethanol concentrations in healthy humans. *Journal of Studies on Alcohol*, 60(1), 103-110.
- Maisto, S.A., Galizio, M., & Connors, G.J. (1999). *Drug Use and Abuse* (3rd edition). Toronto: Harcourt Brace College Publishers.
- Manisses Communications Group (1995). Alcohol abuse in the elderly is nothing to wink at. *Addiction Letter*, 11(5), 4-6.
- Marmot, M.G., Elliot, P., Shipley, M.J., Dyer, A.R., Ueshima, H., Beevers, D.G., Stamler, R., Kesteloot, H., Rose, G., & Stamler, J. (1994). Alcohol and blood pressure: The INTERSALT study. *British Medical Journal*, 308, 1263-1267.
- McKim, W.A., & Quinlan, L.T. (1991). Changes in alcohol consumption with age. *Canadian Journal of Public Health*, 82, 231-234.

- Mellor, M.J., Garcia, A., Kenny, E., Lazerus, J., Conway, J.M., Rivers, L., Viswanathan, N., & Zimmerman, J. (1996). Alcohol and aging. *Journal of Gerontological Social Work* 25(1-2), 71-89.
- Millar, W.J. (1998). Multiple medication use among seniors. *Health Reports*, 9(4), 11-17.
- Miller, N.S., Belkin, B.M., & Gold, M.S. (1991). Alcohol and drug dependence among the elderly: Epidemiology, diagnosis, and treatment. *Comprehensive Psychiatry*, 32, 153-165.
- Mulford, H.A., & Fitzgerald, J.L. (1992). Elderly versus younger problem drinker profiles: Do they indicate a need for special programs for the elderly? *Journal of Studies on Alcohol*, 53(6), 601-610.
- Mulinga, J.D. (1999). Elderly people with alcohol related problems: Where do they go? *International Journal of Geriatric Psychiatry*, 14, 564-566.
- Nemeth, M., & Hiller, S. (1996). Paying the price. *MacLean's*, 109(49), 16-20.
- Neugarten, Dail A. (Ed.). (1996). *The Meanings of Age Selected Papers of Bernice L. Neugarten*. Chicago: The University of Chicago Press.
- Norton, E.D. (1998). Counseling substance-abusing older clients. *Educational Gerontology*, 24(4), 373-389.
- Orgogozo, J.M., Dartigues, J.F., Lafont S., Letenneur, L., Commenges, D., Salamon, R., Renaud, S., & Breteler, M.B. (1997). Wine consumption and dementia in the elderly: A prospective community study in the Bordeaux area. *Revue Neurologique*, 153, 185-192.
- Oslin, D.W. (2000a). Alcohol use in late life: Disability and comorbidity. *Journal of Geriatric Psychiatry and Neurology*, 13(3), 134-140.
- Oslin, D.W. (2000b). Late life addictions: Aspects to consider for the future. *Journal of Geriatric Psychiatry and Neurology*, 13(3), 103-106.
- Oslin, D.W., & Blow, F.C. (2000). Substance use disorders in late life. In I. Katz & D. Oslin (Eds.), *Annual Review of Gerontology and Geriatrics: Focus on Psychopharmacologic Interventions in Late Life* (vol.19, 213-224). New York, NY: Springer Publishing Co. Inc.
- Paradis, S. (1990). *Description de la population participante au projet-pilote « Médicaments et personnes de 55 ans et plus »*. Hull : Département de santé communautaire de l'Outaouais, 1990.

- Parette, H.P., Hourcade, J.J., & Parette, P.C. (1990). Nursing attitudes towards geriatric alcoholism. *Journal of Gerontological Nursing*, 16(1), 26-31.
- Patterson, T.L., & Jeste, D.V. (1999). The potential impact of the baby boom generation on substance abuse among elderly persons. *Psychiatric Services*, 50(9), 1184-1188.
- Poonwassie, A., & Charter, A. (2001). An aboriginal worldview of helping: Empowering approaches. *Canadian Journal of Counselling*, 35(1), 63-73.
- Rains, V.S., & Ditzler, T.F. (1993). Alcohol use disorders in cognitively impaired patients referred for geriatric assessment. *Journal of Addictive Diseases*, 12(1), 55-64.
- Regier, D.A., Boyd, J.H., Burke, J.D. Jr., Rae, D.S., Myers, J.K., Kramer, M., Robbins, L.N., George, L.K., Karno, M., & Locke, B.Z. (1988). One-month prevalence rates of mental disorders in the United States. *Archives of General Psychiatry*, 45, 977-986.
- Rice, C., Longabaugh, R., Beattiem, M.C., & Noel, N. (1993). Age group differences in response to treatment for problematic alcohol use. *Addiction*, 88, 1369-1375.
- Rigler, S.K. (2000). Alcoholism in the elderly. *American Family Physician*, 61(6), 1710-1716.
- Royer, C.M., Dickson-Fuhrmann, E., McDermott, C.H., Taylor, S., Rosansky, J.S., & Jarvik, L.F. (2000). Portraits of change: Case studies from an elder-specific addiction program. *Journal of Geriatric Psychiatry and Neurology*, 13(3), 130-133.
- Ruben, D. (1992). The elderly and alcohol and medication abuse. In C. Stout & J. Levitt (Eds.), *Handbook for Assessing and Treating Addictive Disorders* (pp. 215-235). Westport, CT: Greenwood Press/ Greenwood Publishing Group Inc.
- Rush, B.R., & Ogborne, A.C. (1992). Alcoholism treatment in Canada: History, current status and emerging issues. In H. Klingemann, J.P. Jakala & G. Hunt (Eds.) *Cure, Care in Control. Alcoholism Treatment in Sixteen Countries. SUNY Series in New Social Studies on Alcohol and Drugs* (pp. 253- 267). Albany, NY: State University of New York Press.
- Schneider-Helmert, D. (1988). Why low-dose benzodiazepine-dependent insomniacs can't escape their sleeping pills. *Acta Psychiatrica Scandinavica*, 78, 706-711.

- Schonfeld, L., & Dupree, L.W. (1991). Antecedents of drinking for early- and late-onset elderly alcohol abusers. *Journal of Studies on Alcohol*, 52(6), 587-592.
- Schonfeld, L., Rohrer, G.E., Zima, M., & Spiegel, T. (1993). Alcohol abuse and medication misuse in older adults as estimated by service providers. *Journal of Gerontological Social Work*, 21(1/2), 113-125.
- Schutte, K.K., Byrne, F.E., Brennan, P.L., & Moos, R.H. (2001). Successful remission of late life drinking problems: A 10-year follow-up. *Journal of Studies on Alcohol*, 62(3), 322-334.
- Scott, K. (1992). Substance use among indigenous Canadians. In D. McKenzie (Ed.) *Aboriginal Substance Use: Research Issues. Proceedings of a Joint Research Advisory Meeting* (<http://www.ccsa.ca/docs/mckenzie.htm>)
- Segal, D.L., Van Hasselt, V.B., Hersen, M., & King, C. (1996). Treatment of substance abuse in older adults. In J.R. Cautela & W. Ishaq (Eds.) *Contemporary Issues in Behavior Therapy: Improving the Human Condition* (pp. 69-85). New York, NY: Plenum Press.
- Seniors in Action (1992). Medication use by seniors. *Senior's Info Exchange*, 1(1), 9-11.
- Sheikh, J.I. (1994). Anxiety disorders. In: C.E. Coffey, J.L. Cummings, et al. (Eds), *The American Psychiatric Press Textbook of Geriatric Neuropsychiatry* (pp. 279-296). Washington, DC: American Psychiatric Press.
- Shipman, A. (1990). Communities aren't helpless: Outreach to older alcoholics works. *Aging*, 361, 18-21.
- Smith, J.W. (1995). Medical manifestations of alcoholism in the elderly. *International Journal on the Addictions*, 30, 1749-1798.
- Solomon, K., Manepalli, J., Ireland, G.A., & Mahon, G.M. (1993). Alcoholism and prescription drug abuse in the elderly: St. Louis University Grand Rounds. *Journal of the American Geriatrics Society*, 41(1), 57-69.
- Speckens, A.E.M., Heeren, T.J., & Rooijmans, H.G.M. (1991). Alcohol abuse among elderly patients in a general hospital as identified by the Munich Alcoholism Test. *Acta Psychiatrica Scandinavica*, 83(6), 460-462.
- Speer, D.C., O'Sullivan, M.O., & Schonfeld, L. (1991). Dual diagnosis among older adults: a new array of policy and planning problems. *The Journal of Mental Health Administration*, 18(1), 43-50.

- Spencer, C. (2000). Unpublished manuscript: A snapshot of what's happening across Canada: Seniors and alcohol issues. Gerontology Research Centre, Simon Fraser University.
- Spencer, R.L., & Hutchinson, K.E. (1999). Alcohol, aging, and the stress response. *Alcohol Research and Health*, 23(4), 272-283.
- Statistics Canada (2002). *Statistical snapshots of Canada's Seniors*. Health Canada: Division of Aging and Seniors. www.hc-sc.gc.ca/seniors-aines.
- Statistics Canada (2000). *Statistical snapshots*. Health Canada: Division of Aging and Seniors. www.hc-sc.gc.ca/seniors-aines.
- Statistics Canada (1999). *A Portrait of Seniors in Canada*. 3rd ed. Ottawa: Statistics Canada. Cat. No. 89-519-XPE.
- Statistics Canada (1997). *A Portrait of Seniors in Canada*. 2nd ed. Ottawa: Statistics Canada. Cat. No. 89-519-XPE.
- Stoddard, C., & Thompson, D.L. (1996). Alcohol and the elderly: Special concerns for counseling professionals. *Alcoholism Treatment Quarterly*, 14(4), 59-69.
- Tabisz, E., Badger, M., Meatherall, R., Jacyk, W.R., Fuchs, D., & Grymonpre, R. (1991). Identification of chemical abuse in the elderly admitted to emergency. *Clinical Gerontologist*, 11(2), 27-38.
- Tabisz, E.M., Jacyk, W.R., Fuchs, D., & Grymonpre, R. (1993). Chemical dependency in the elderly: The enabling factor. *Canadian Journal on Aging*, 12(1), 78-88.
- Tamblyn, R.M., McLeod, P.J., Abrahamowicz, M., Monette, J., Gayton, D.C., Berkson, L., Dauphinee, D., Grad, R.M., Huang, A.R., Isaac, L.M., Schnarch, B.S. & Snell, L.S. (1994). Questionable prescribing for elderly patients in Quebec. *Canadian Medical Association Journal*, 150(11), 1801-1809.
- Tamblyn, R.M. & Perreault, R. (1998). Encouraging the wise use of prescription medication by older adults. In *Canada: National Forum on Health. Canada Health Action: Building on the Legacy; Papers Commissioned by the National Forum on Health. Volume 2, Determinants of Health: Adults and Seniors*. Ottawa: National Forum on Health; Sainte Foy, Qué.: Éditions MultiMondes (pp. 213-285).
- Ticehurst, S. (1990). Alcohol and the elderly. *Australian and New Zealand Journal of Psychiatry*, 24(2), 252-260.

- Todtman, K., & Todtman, D. (1997). Seniors outreach program: An alternative service for older people with substance use problems. *Journal of Health Care for the Poor and Underserved*, 8(4), 405-410.
- Varcoe, C. (1998). *From "Better Than Nothing" to "Best Practices": A Background Paper on "Best Practices" in Health Care in Relation to Violence Against Women*. Victoria: Ministry Advisory Council on Women's Health, British Columbia Ministry of Health.
- Washington State Substance Abuse Coalition (1995). *Here's to Your Good Health: Facts about Aging, Prescription Medications and Alcohol*. Bellvue, WA: Washington State Department of Social and Health Services.
- Weiss, S. (1993). Alcohol and the elderly: An overlooked phenomenon in the literature in developing countries – the Israeli case. *Drug and Alcohol Review*, 12, 217-224.
- Welte, J.W., & Mirand, A.L. (1995). Drinking, problem drinking and life stressors in the elderly general population. *Journal of Studies on Alcohol*, 56(1), 67-73.
- West, P.M., & Graham, K. (1999). Clients speak: Participatory evaluation of a nonconfrontational addictions treatment program for older adults. *Journal of Aging and Health*, 11(4), 540-564.
- Widner, S., & Zeichner, A. (1991). Alcohol abuse in the elderly: Review of epidemiology research and treatment. *Clinical Gerontologist*, 11(1), 3-18.
- Woods, R.T. (1996). Mental health problems in late life. In R.T. Woods (Ed.), *Handbook of the Clinical Psychology of Ageing* (pp.197-218). Toronto: John Wiley & Co.
- Yuan, Z., Dawson, N., Cooper, G.S., Einstadter, D., Cebul, R., & Rimm, A.A. (2001). Effects of alcohol-related disease on hip fracture and mortality: A retrospective cohort study of hospitalized medicare beneficiaries. *American Journal of Public Health*, 91(7), 1089-1093.
- Zimberg, S. (1996). Treating alcoholism: An age-specific intervention that works for older patients. *Geriatrics*, 51(10), 45-49.
- Zweben, A., & Fleming, M.F. (1999). Brief Interventions for Alcohol and Drug Problems. In: J.A. Tucker, D.M. Donovan & G.A. Marlatt (Eds.), *Changing Addictive Behavior: Bridging Clinical and Public Health Strategies* (pp. 251-282). New York: The Guilford Press.