

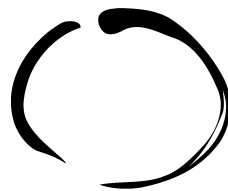


Availability of Physical Activity Programs in Alberta Continuing Care Facilities

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Introduction

In 1991, 11.6% of the Canadian population was 65 years of age or older (Northcott, 1997). It is estimated that the percentage of the population in this age group will be 14% by the year 2011, 16% by the year 2016, and 22% by the year 2041. By 2016, Canadians aged 65-74 and 75-84 will represent 58% and 29% respectively, of those over the age of 65 years, while those who are 85+ will account for 13% of the total. Projections into the next century show steady to rapid increases in these age groups with the fastest growing segment being those aged 85+. By 2041 there will be almost 1.6 million Canadians age 85 or older, accounting for nearly 4% of the total population (Statistics Canada, 1994; Lindsay, 1999).

Approximately 10% of the Alberta population is currently 65 years of age or older (Lai, 1999; Northcott 1997). By the year 2011, it is estimated that 12.2% of the Alberta population will be age 65 or older. Projected provincial increases show a growth pattern similar to Canada overall with those who are 85 and over accounting for 1.63% of provincial totals (Northcott, 1997).

Regarding residency, the majority of older Canadians continue to reside in their own homes or with family members and lead relatively independent, active lives (Lindsay, 1999). Nevertheless, the likelihood of institutionalization increases with age. In 1991, about 18% of Albertans 75 years and older resided in collective dwellings such as lodges, nursing homes and hospitals (Northcott, 1997). Those who live in continuing care centers (i.e., nursing homes, auxiliary hospitals) are typically female and many have at least one chronic health condition limiting their mobility and/or physical activity. Currently in Alberta the average age of a resident in a continuing care facility is 82 years, with the majority of residents between the ages of 75 and 94 (Alberta Health, 1995).

One of the fundamental goals of continuing care services in the province is to improve or maintain the quality of life of individuals in their care. As such, consideration must be given to the role of physical activity for enhancing the quality of life of older Albertans.

A considerable body of research now exists that demonstrates physical inactivity constitutes a major public health concern (Bouchard, Shephard, & Stephens, 1994; U.S. Department of Human Services, 1996; Villeneuve, Morrison, Craig, & Schaubel, 1998) with related social and economic costs (Birmingham, Muller, Palepu, Spinelli, & Anis, 1999; The Conference Board of Canada, 1996; Wood, 1993). We also know that physical activity is associated with significant health benefits for individuals and populations across the life span. Active living is a recognized strategy for health promotion and quality of life. A growing body of evidence reports health gains among seniors who remain physically active throughout life. Apart from enhanced psychological well-being, physical activity can lead to an increase in balance and muscular strength that in turn increases the ability to perform activities of daily living (Koroknay et al., 1995; MacRae et al., 1996). In fact, the physical activity level of older adults is directly related to their ability to live independently.

Building on the evidence, a number of documents and action statements which foster increasing physical activity among older adults have been produced. For instance, The American College of Sports Medicine (1998) recently released a position statement on physical activity for older adults. On the national scene, in a product similar to the Canada Food Guide, Health Canada (1999) has published physical activity guidelines specific to older adults. The critical element in both of these documents is that physical activity, in a variety of forms and modes, should be engaged in by older adults on most days of the week. In the same vein, the Active Living Coalition for Older Adults (ALCOA, 1999) recently released *Moving Through the Years: A Blueprint for Action for Active Living and Older Adults*.

Contributing to this momentum, in Alberta several recommendations within the recent report *Towards an Active and Prosperous Alberta, the Health and Well-Being Advantage* (Alberta Active Living Task Force, 1998) pertain to older adults. Initiatives such as the Alberta Council on Aging, "Senior Friendly Project" and the establishment of an Older Adult Coordinator position at the Alberta Centre for Well-Being (ACFWB), reflect an interest in the physical activity levels of older adults in this province.

The ACFWB research mandate is to explore the benefits, barriers, and determinants of physical activity for all Albertans. In a recent ACFWB survey (Spence, Poon, & Mummery, 1998), 55% of non-institutionalized Albertans (i.e., having access to a telephone and not residing in prisons, hospitals, or continuing care facilities) report they are physically active. Of those aged 65+ years and living independently, 59% are active 3 or more times per week. While barriers such as health conditions exist, these activity levels among older adults are very good overall. Nonetheless, there are gaps in the research literature on physical activity and the elderly. Many studies have stated the importance of continuing care environments that promote physical activity for older adults (Ruuskanen & Parkatti, 1994; Loomis & Thomas, 1991). One group whose physical activity opportunities have been largely unexamined are those who reside in continuing care centres. Recommendation #18 of the Alberta Active Living Task Force report (1998, p. 22) states "That all operators of housing and care institutions for older adults be required to provide facilities and resources, including appropriate staff, in order to provide opportunities for their residents to engage in regular physical activity." Currently, no information has been compiled on the degree to which physical activity is offered in continuing care facilities in Alberta.

The purpose of this study is to determine the current status of physical activity programs in Alberta continuing care facilities. As the older adult population increases in proportion to other age groups, it will be important to address their physical activity needs to help offset chronic and debilitating diseases that may arise from sedentary living. The present study gives a much-needed picture of the range and availability of physical activity programs in Alberta continuing care facilities as well as some recommendations for future directions.

Method

Participants

A list of nursing homes and auxiliary hospitals was obtained from the Alberta Long Term Care Association. This list was cross-referenced with lists obtained from the Capital Health Authority, Alberta telephone directories, and various directories of services for seniors in Alberta. A total of 97 long-term care and continuing care facilities within Alberta were contacted. Rural auxiliary hospitals were selected if a nursing home facility was not present in that community (Figure 1 & 2). Of the 97 facilities contacted, one refused to participate and six, while agreeing to participate, did not return the questionnaire. The response rate (facilities responding vs. total number of valid facilities) was 92.8%. The recreation coordinator, or their equivalent (e.g., occupational therapist), responded on behalf of the institution.

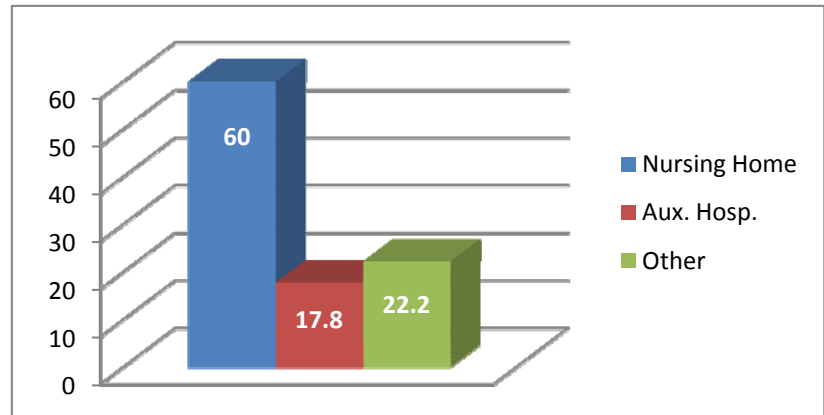


Figure 1. Type of Facility

Rural auxiliary hospitals were selected if a nursing home facility was not present in that community (Figure 1 & 2). Of the 97 facilities contacted, one refused to participate and six, while agreeing to participate, did not return the questionnaire. The response rate (facilities responding vs. total number of valid facilities) was 92.8%. The recreation coordinator, or their equivalent (e.g., occupational therapist), responded on behalf of the institution.

Materials

Each institution responding completed a two-page, questionnaire consisting of open and closed-ended questions. Information was solicited about the size of the facility, the type of recreational activities (including physical activities) provided within the facility, estimated participation rates within these programs, and recreational staff qualifications.

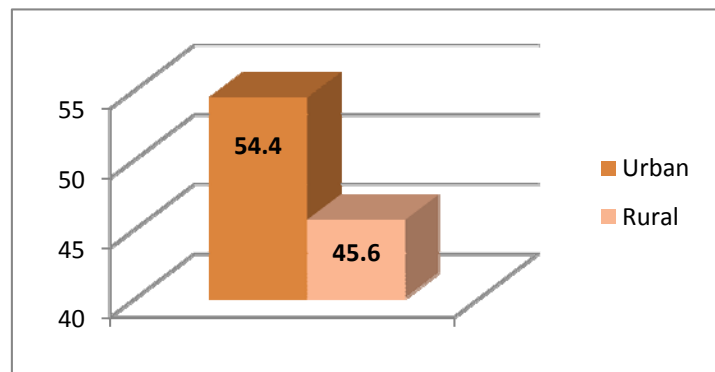


Figure 2. Regional distribution of facilities

Procedure

The 97 facilities were initially contacted by telephone to obtain a contact individual as well as an agreement to participate in the study. Those facilities that agreed to participate in the study were sent a package including a cover letter providing information regarding the purpose of the study, the questionnaire, and a self-addressed, postage-paid return envelope. The cover letter indicated

the survey should be completed by a staff member qualified to answer questions regarding physical activity programs within the facility. Four weeks after the initial mailout a follow-up letter was sent to those facilities who had not returned a completed survey. Subsequent to this letter, after another four-week period, a follow-up phone call was made to the facilities whose surveys had not yet been received.

Results

Preliminary analysis indicates that 100% of the facilities provide some type of physical activity programming for their residents, with the majority of programming (97.8%) taking place within the facilities and being led by various types of physical activity leaders (Table 1). The most popular programs are flexibility/stretching (91%), walking (85.6%), and sport activities (83.3%). Only 55.6% of the facilities offer strength training.

Table 1. Types of physical activity leaders in Alberta continuing care facilities

Leaders of Physical Activity Programs	Overall	Rural	Urban
Recreation Therapist	80.0%	85.4%	75.5%
Rehab Assistant	43.3	53.7	34.7
Physiotherapist	37.8	36.6	38.8
Activity Coordinator	34.4	36.6	32.7
Recreation Assistant	33.3	34.1	32.7
Occupational Therapist	23.3	7.3	36.7

Note: Shaded areas represent noticeable differences between rural and urban centres. Also the categories are not mutually exclusive, so across columns the total can exceed 100%.

According to Canada's Physical Activity Guide to Healthy Active Living for Older Adults (Health Canada, 1999), it is best to incorporate endurance, flexibility, and strength activities to maintain health. Table 2 displays the percentage of Alberta continuing care facilities that provide the types, frequency, and duration of physical activity recommended. In addition, Table 2 displays the percentage of Alberta facilities that offer continuous programming for three types of activities. Less than 50% of the facilities meet the frequency and duration guidelines for endurance, flexibility and strength activities.

On average, 44% of residents in the facilities participate in some level of physical activity while approximately 70% participate in other more sedentary forms of recreational activities (e.g., bingo, cards, etc.). Overall, a lack of interest on the part of residents is the most frequent reason given for not providing more physical activity programming. However, perceived barriers were different between rural and urban facilities (Figure 3). For example, lack of equipment is

perceived as a barrier to offering more physical activity programs in rural facilities, yet, it is of little concern for facilities in urban areas.

Table 2. Percentage of Alberta continuing care facilities that provide the types, frequency, and duration of physical activity recommended by Canada's Physical Activity Guide to Healthy Active Living for Older Adults.

Types of Physical Activity Programs:		Overall (%)	Urban (%)	Rural (%)
Walking (Endurance Activities)	Continuous programming*	61.1	63.3	58.5
	Frequency (4-7 days per week)	28.8	32.6	24.4
	Duration (30-60 minutes)	27.8	28.6	26.8
Flexibility/Stretching (Flexibility Activities)	Continuous programming*	88.9	87.8	90.2
	Frequency (daily)	3.0	4.0	2.4
	Duration (30-60 minutes)	55.6	53.1	58.6
Strength Training (Strength Activities)	Continuous programming*	53.3	59.2	46.3
	Frequency (2-4 days per week)	31.3	36.7	24.4
	Duration (30-60 minutes)	27.8	30.6	24.3

*Continuous programming = regular physical activity programs provided throughout the year.

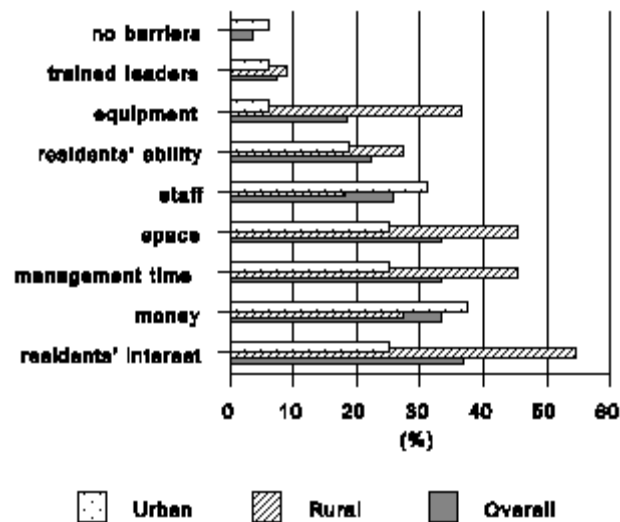


Figure 3. Perceived barriers to offering more physical activity programs in Alberta continuing care facilities

Comments

At first glance, these findings are encouraging. Every facility provides some type of physical activity programming. In addition, most of the facilities offer continuous programming for the types of activities (i.e., endurance, flexibility, and strength activities) recommended by Canada's Physical Activity Guide to Healthy Active Living for Older Adults. In terms of the frequency and duration of activity, a majority of the facilities do not meet the current guidelines for older adults. For instance, the guide recommends that flexibility and balance activities be incorporated every day for older adults. However, only 3.3% of Alberta continuing care facilities offer daily flexibility programming. Since the residents' opportunities for active living are often limited to those activities provided within the continuing care facilities, it is critical that these facilities foster an environment where residents can participate according to the current recommended guidelines for physical activity.

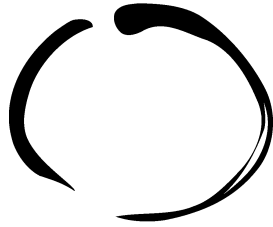
Recommendations

1. Copies of *Canada's Physical Activity Guide to Healthy Active Living for Older Adults* (Health Canada, 1999) and *Moving Through the Years: A Blueprint for Action for Active Living and Older Adults* (ALCOA, 1999) should be distributed to all continuing care facilities.
2. Flexibility and stretching exercises should be incorporated, on a daily basis, into all physical activity sessions in continuing care facilities.
3. Given that strength training is associated with enhanced balance and reduced falls in the elderly (Wolfson et al., 1995), it is of concern that only 56% of facilities offered such programs. We recommend that all continuing care facilities in Alberta incorporate strength training into their physical activity programming.
4. Lack of interest on the part of residents, was one of the most frequent reasons given for not offering more physical activity programs. We recommend that further education and research be conducted on the motivation and participation of older adults in activity programs. More effort should also be made to identify programs that are of interest to residents within the specific institutions.
5. Divergent issues confronted by rural and urban facilities indicate a need for the appropriate allocation of resources, support, and policy for physical activity programs in continuing care facilities.
6. Leadership training and continuing education should be provided for staff who facilitate activity programs in older adult continuing care facilities.

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