
Regardless of differing opinions about the impact of population aging, Canada is going to experience an increase in the proportion of adults age 65+. These older adults will be healthier and will have a better quality of life if they engage in regular physical activity. Regular physical activity plays an important role in maintaining the health of older adults and reducing the decline in functioning that is associated with aging (Warburton, Whitney Nicol, & Bredin, 2006).

Regular physical activity can also improve the health of older adults even among those who are physically frail (Fiatarone et al., 1990). Studies have shown that frail older adults experience gains in strength, physical function and aerobic capacity when they participate in...
regular physical activity (Baum, Jarjoura, Polen, Faur, & Rutecki, 2003; Binder et al., 2002; Hruda, Hicks, & McCartney, 2003).

Given the key role of physical activity in the health of older adults, it’s important that long-term care and other older adult housing facilities offer adequate physical activity opportunities to their residents.

**Previous Research on Physical Activity Programs at Long-term Care Facilities in Canada**

In 1999, 98% of long-term care facilities in London, Ontario, offered an exercise program for residents (Lazowski et al., 1999); in Alberta, 100% (Poon, Spence, Watchman, & Carlson, 1999).

Although this appears encouraging on the surface, Poon et al. (1999) pointed out that only a minority of programs met the minimum recommendations for physical activity as specified by Canada’s Physical Activity Guide to Healthy Active Living for Older Adults (Health Canada, 1999). The guide recommends endurance activities for 20 minutes or longer four to seven days a week, strength activities for 10 minutes or longer two to four days a week, and flexibility activities for 10 minutes or longer every day.

Besides the above, little research has explored the availability of physical activity opportunities in older adult facilities in Canada. And although Atlantic Canada has relatively high proportions of older adults, the opportunities for physical activity at older adult facilities had not been examined until we conducted our study.

**Our Study on Older Adult Housing Facilities in Atlantic Canada**

We designed a study to assess the availability of physical activity opportunities within older adult housing facilities across Newfoundland and Labrador, Nova Scotia, Prince Edward Island and New Brunswick.

We accessed provincial government websites to obtain lists of provincially run older adult housing facilities in the four Atlantic provinces. To ensure our list was as accurate and comprehensive as possible, we also spoke with provincial representatives who provided additional information on as many of the provincially and privately run facilities as possible. Our final list included 807 provincially and privately run facilities across the four provinces.

We designed a survey to be completed by the physical activity program leaders at the facilities (where possible). Some questions were original, and some were adopted from Hughes et al. (2005) and Poon et al. (1999). Here are some of the questions we asked:

- Do you offer physical activity programs for your residents?
- If yes, what types (endurance, strength, flexibility)?
- If you do not offer some or any physical activity programs, why not?
- Have you taken a recognized program of study that included physical activity training?

We mailed our survey in June 2008. We sent a reminder card three weeks after the initial mail date to prompt facilities that had not responded. The last survey was returned to us in September 2008.

We received a total of 163 completed surveys; 155 were from facilities that housed at least one resident age 65+. For the purposes of this article, we are reporting the data obtained from long-term care
facilities only (which accounted for 112 or 72% of the completed surveys).

Findings from Our Study

Key results from the surveys completed by long-term care facilities are as follows:

• 89% offered physical activity programs.
• No facility offered all three activity types (endurance, strength and flexibility) at the optimal frequency and duration as recommended by Canada’s Physical Activity Guide to Healthy Active Living for Older Adults.
• Two facilities (1.8%) offered all three activity types at the minimum recommended frequency and duration if the less stringent criterion of flexibility activities at least five days a week was used.
• Twelve facilities did not offer physical activity programs. As to why, 91.7% indicated a lack of interest among residents, 33.3% indicated inadequate space, 25% inadequate equipment, 25% a lack of time, 16.7% a lack of trained leaders and 16.7% a lack of money.
• 39.3% of respondents had physical activity training.

Compared to Poon et al. (1999), the proportion of long-term care facilities offering year-round aerobic, flexibility and strength activities is considerably lower, as is the proportion of programs adhering to the frequency and duration guidelines of Canada’s Physical Activity Guide to Healthy Active Living for Older Adults.

Discussion and Suggestions for Facilities

We are encouraged that most long-term care facilities that responded to our survey offered physical activity opportunities to residents.

However, flexibility activities were the only type of activity offered continuously to residents throughout the year by a majority of facilities. Continuous, year-round endurance and strength activities were offered by less than 25% of the facilities.

** % of Long-term Care Facilities in Atlantic Canada* that Provide the Types, Frequency, and Duration of Physical Activity Recommended by Canada’s Physical Activity Guide to Healthy Active Living for Older Adults (Health Canada, 1999)

<table>
<thead>
<tr>
<th>Physical Activity Type</th>
<th>Frequency or Duration</th>
<th>%*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endurance/ aerobic</td>
<td>Continuous programming**</td>
<td>22.3%</td>
</tr>
<tr>
<td></td>
<td>Frequency (four or more days per week)</td>
<td>5.4%</td>
</tr>
<tr>
<td></td>
<td>Duration (20 minutes or more)</td>
<td>20.5%</td>
</tr>
<tr>
<td>Flexibility/stretching</td>
<td>Continuous programming**</td>
<td>54.5%</td>
</tr>
<tr>
<td></td>
<td>Frequency (daily)</td>
<td>2.7%</td>
</tr>
<tr>
<td></td>
<td>Frequency (five or more days per week)</td>
<td>13.4%</td>
</tr>
<tr>
<td></td>
<td>Duration (10 minutes or more)</td>
<td>58.0%</td>
</tr>
<tr>
<td>Strength</td>
<td>Continuous programming**</td>
<td>24.1%</td>
</tr>
<tr>
<td></td>
<td>Frequency (two or more days per week)</td>
<td>21.4%</td>
</tr>
<tr>
<td></td>
<td>Duration (10 minutes or more)</td>
<td>24.1%</td>
</tr>
</tbody>
</table>

* % of the 112 surveys returned by long-term care facilities.

** Continuous programming refers to regular physical activity programming provided throughout the year.

Of particular concern, no facilities offered the full range of activities at a frequency and duration that would satisfy the optimal recommendations from Canada’s Physical Activity Guide to Healthy Active Living for Older Adults. Only two facilities met the minimum recommendations when a less stringent criterion for flexibility activities was used.

Consequently, it appears that the residents of these facilities may lack opportunities to obtain the benefits of regular physical activity.

Since residents’ opportunities for physical activity may often be limited to activities held within the facilities
where they live, it is essential that facilities foster an environment where residents can participate in physical activity according to Canada’s official guidelines for older adults.

So how is such an environment created? What can facilities do to accomplish this?

- Provide residents with the opportunity to receive a personalized physical activity program from a physical activity professional. Each program would be catered to the individual needs and goals of a resident with an emphasis on maintaining or improving functional health.
- Provide physical activity education and training to employees.
- Hire physical activity professionals who also have training for working with older adults.
- Ensure that endurance, flexibility and strength activities are offered year-round.
- Arrange transportation and other aids to help residents attend physical activity opportunities outside of the facility.
- Learn about the barriers that might prevent residents from participating in physical activity, and learn about the factors that might motivate them to participate. Then, offer programming that overcomes barriers and takes advantage of motivating factors.

It’s important that administrators and staff at older adult housing facilities emphasize the role of physical activity in health and well-being. Sometimes this point may be overshadowed by physical activity’s role in rehabilitating lost physical function. However, restoration of physical function is just one benefit of regular physical activity. It also improves muscle strength, fitness, functional health and mobility even among institutionalized, and possibly frail, older adults.

For more information about this study, please contact Chad Witcher at 780-492-2004 or by e-mail (cwitcher@ualberta.ca). References are available on the Alberta Centre for Active Living’s website at www.centre4activeliving.ca.

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Mission Statement of the Alberta Centre for Active Living
Working with practitioners, organizations, and communities to improve the health and quality of life of all people through physical activity.

IF YOU HAVE ANY SUGGESTIONS OR QUESTIONS, WE’D LIKE TO HEAR FROM YOU.
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