Using an Ecological Approach to Understanding the Barriers and Facilitators to Physical Activity Promotion among Seniors in Rural and Urban Contexts in Alberta

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### Background

- Physical activity (PA) is associated with the prevention and treatment of a wide range of physical and psychological disorders (Dishman et al., 2004).
- Older adults (Loitz, Berry & Spence, 2009) and people living in rural areas (O’Kane, Craig, Black & Thorpe, 2008; Walker, Pullen, Boeckner, et al., 2009) are at greater risk of physical inactivity.
- Understanding the barriers to participation for these population is critical to the development and planning of interventions designed to increase PA.
- An ecological approach (Sallis et al., 2006) highlights interactions between intrapersonal (individual), interpersonal (social), community & environmental and organizational levels of influence for PA.

### Purpose

- To explore the barriers and facilitators to PA among older adults in rural and urban settings using an ecological approach (Sallis et al., 2006).

### Methods

- Twenty-one older adults, mean age 69 years, from three communities (urban, semi-urban, and rural) took part in one of the three focus groups.
- Participants were asked about their barriers and facilitators to PA (e.g. active transport, leisure-time PA and household PA). After the open-ended questioning, participants were asked to consider the ecological model and identify any barriers and facilitators not previously reported.
- Focus group interviews were transcribed verbatim and analyzed systematically to identify recurring themes. Barriers and facilitators to PA were conceptualized according to Sallis’s et al (2006) ecological approach.

### Results

- Facilitators to PA among all participants were most commonly associated with the interpersonal or social levels.
- Barriers to PA were most often associated with the individual level, community and physical environment and policy level of the ecological model for all participants.
- Adults from rural areas referred most frequently to community and physical environment barriers.

### Implications

- The ecological model was useful in exploring the facilitators and barriers to PA for older adults.
- The data highlight the salience of the ecological model in planning and tailoring interventions for older adults when considering the size of the community.

## Barriers and facilitators for all older adults:

<table>
<thead>
<tr>
<th>Environmental</th>
<th>Cost of programming, lack of parking, lack of instructors, poor road conditions</th>
<th>Lack of Seniors' programming, winter/poor weather, town centered around vehicles not active transport, no sidewalk, uneven &amp; cracked sidewalks, poor road conditions, lack of instructors, safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal/ Social</td>
<td>Socializing (get away from social isolation), family and friends encourage me, fun, energy, health, weight loss</td>
<td>Fun, energy, health, weight loss, lack of motivation, pain, low self-efficacy, mental &amp; physical health (fear of getting worse)</td>
</tr>
<tr>
<td>Individual</td>
<td>Fun, energy, health, weight loss</td>
<td>Fun, energy, health, weight loss, lack of motivation, pain, low self-efficacy, mental &amp; physical health (fear of getting worse)</td>
</tr>
</tbody>
</table>

Note:
- Blue font = rural only
- Green font = facilitators
- Red-brown font = barriers

In the winter, if you get a sleet storm or something and the roads and sidewalks are icy as heck, you’re not going to go out walking. Even driving could get hazardous type of thing so you’re not going to drive.

There’s also a social aspect, especially when you’re dealing with the group activities… get away from talking to the four walls and… a dog or a cat that won’t listen to you anyway.

I earned the right to do nothing.

I walk every day for an hour at least. I have a chocolate lab dog that keeps me very honest.

My passion is movement because 12 years ago I was diagnosed with rheumatoid arthritis and I find if I don’t move even after an hour, I’m totally seized up.