

Tackling social isolation and loneliness through community exercise programs for seniors

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Abstract

Social isolation is a growing problem among Canadian seniors, and along with loneliness, has been related to negative health effects and increased morbidity and mortality. The majority of senior recreation programs and the studies that surround them focus on physical benefits, while ignoring the effects of the programs on social isolation and loneliness. Furthermore, few community programs in Canada currently incorporate socialization sessions into exercise programs. This article attempts to highlight studies that focus on tackling the issue of social isolation and loneliness in traditional community senior exercise programs, and the potential role of sustained socialization-based exercise programs on improving seniors' health.

The population of Canadian seniors (ages 65 years and older) is projected to double in the next 25 years¹ and for the very first time, the number of seniors will surpass the number of children. As one ages, social networks decline such that over 30% of Canadian seniors are at a risk of becoming socially isolated.² Social isolation is defined as a quantifiable measure of a reduced social network (i.e. number and quality of social, family, and friend contacts).³ Social isolation is closely related to loneliness, which is a subjective measure of the negative feelings associated with a perceived lack of social network.³ Major risk factors for seniors' social isolation and loneliness can be divided into five categories that include physical (e.g. hearing loss), psychological (e.g. depression), economic (e.g. retirement status), changes in work and family roles (e.g. loss of a loved one), and environmental (e.g. living alone).⁴ From a clinical perspective, social isolation and loneliness relates to negative effects on seniors' psychosocial well-being and physical health. Loneliness has been associated with increased rates of depression, cognitive decline, impaired sleep, increased vascular resistance, increased systolic blood pressure, and altered immunity.⁵ In addition, many studies have also linked social isolation to an increase in premature mortality.^{6,7,8}

In British Columbia, major cities offer recreation programs to allow the growing senior population to stay active. Benefits of community exercise programs on physical health and mortality in seniors have been studied extensively in literature. Unfortunately, many ignore the potential uses of these programs on mitigating social isolation and loneliness. As the effects of social isolation and loneliness are becoming more apparent in the senior population, this article attempts to highlight studies that focus on tackling the issue of social isolation and loneliness in traditional community senior exercise programs.

In Finland, a randomized controlled trial was conducted in seven daycare centers with 235 seniors (age 74 years or older) suffering from loneliness.⁹ Prior to randomization and based on their personal preference, participants chose either group exercise and discussion (n=92), therapeutic writing and group psychotherapy (n=48), or art activities (n=95). Each group was subsequently randomized 1:1 into control (usual community care) and intervention groups. Interventions

took place over a three-month period and consisted of 12 sessions each. After two years, the survival rate of the three intervention groups (97%: 95% CI 91-99) was statistically significantly higher than the control group (90%: 95% CI 83-95) (p=0.042), but due to the small sample size, the 95% CI overlapped. In addition, the intervention group had greater improvements in subjective health (p=0.007), which is a strong predictor of survival, and decreased use of healthcare services (p=0.039). Subjective health is how individuals perceive their own health ranging from feeling "very unhealthy" to "healthy" on a four-point scale. This implies that programs of this nature may reverse deteriorating health as well as decreasing social isolation.

In 2014, researchers in Australia investigated the factors which motivate older people to engage in physical activity.¹⁰ Researchers created a community-based physical activity program and interviewed ten participants between the ages of 62 and 75 years old. While the program did not consider 'socialization' as a motivational component, research showed that 'social interaction' was mentioned by all participants as an important reason for their involvement. It allowed participants to create meaningful friendships and gain freedom from social isolation. Friendship and social interaction not only contributed to their original involvement in a given community program, but also helped maintain or reignite their interest. The data supported the notion of community-based exercise programs having a socialization component to help participants develop friendships and relieve social isolation.

To address this gap, Walk N' Talk for Your Life (WTL) was developed in September 2014 by CJ. The WTL program was guided by input from over 200 older adults living in six low-income housing residences in Calgary, Alberta. Located in Kelowna, British Columbia. WTL is a student and community volunteer-run socialization, health education, and physical health program focused on alleviating loneliness and social isolation, as well as improving physical function among seniors. It was created based on feedback from community members, who requested a program that incorporates socializing, physical activity, and health education. Since its inception, over 300 seniors have participated in WTL programs held in eight separate community locations. WTL continues for its third year at one location, and funding has recently been obtained to carry the program on for three more years. Additionally, it has been adopted into ongoing weekly programming by the staff at another seniors' residence. The program runs twice weekly for 12 weeks. Participants attend a thirty-minute

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group walk, and then a forty-five-minute strengthening, balance, and resistance training program based on the validated Otago falls prevention program.¹¹ This is followed by an hour of interactive health discussion, the topics of which are decided by participant consensus. Preliminary qualitative data from in-depth interviews with participants suggested an improving trend in social isolation and loneliness by the end of the program. Unofficial verbal feedback from participants and feedback from a community survey of over 180 community members has been positive, with the majority wishing to continue programs similar to WTL.

Although similar community programs have shown beneficial effects on social isolation, loneliness,¹² morbidity, and mortality,⁹ there are also studies that reveal limitations of such programs. For example, McAuley suggested that the effects of such community programs may be of limited duration.¹³ He argues that participants' satisfaction in life may decrease again within six months after conclusion of the program.¹³ On the other hand, Pitkala showed that several participants have been able to overcome this limitation by maintaining long-standing friendships and continuing to meet independently even after the study ended.⁹ Similarly, Kelowna also has a group of ex-participants who walk together on a regular basis even after the termination of the WTL program.

The investigative team has secured funding to develop an online interactive WTL implementation toolkit for student and faculty use at other University of British Columbia sites and universities. Included in this toolkit will be learning modules that provide step-by-step instructions on how to implement a WTL program in other communities. Currently, the WTL program has been adapted for older adults with hearing loss, which is a major risk factor for social isolation¹⁴ and poor physical function,¹⁵ and plans are underway to adapt the program further for Aboriginal seniors and other marginalized elderly populations.

Despite providing physical and mental health benefits, including improvements on loneliness and social isolation, few community programs in Canada currently incorporate socialization sessions into exercise programs. There is a need to raise awareness about the effects of loneliness and social isolation on morbidity and mortality, and the

potential role of sustained socialization-based exercise programs to combat these factors and improve seniors' health.

References

1. Report on the Social Isolation of Seniors October 2014 [Internet]. Seniorscouncil.gc.ca. 2016 [cited 16 March 2016]. Available from: http://www.seniorscouncil.gc.ca/eng/research_publications/social_isolation/page03.shtml.
2. Keefe J, Andrew M, Fancey P, Hall M. Final Report: A profile of Social Isolation in Canada. Submitted to the Chair of the F/P/T Working Group on Social Isolation; 2006.
3. Valtorta N, Hanratty B. Loneliness, isolation and the health of older adults: do we need a new research agenda?. *JRSM*. 2012; 105(12):518-522.
4. Nicholson N. A Review of Social Isolation: An Important but Underassessed Condition in Older Adults. *The Journal of Primary Prevention*. 2012; 33(2-3):137-152.
5. Luo Y, Hawkey L, Waite L, Cacioppo J. Loneliness, health, and mortality in old age: A national longitudinal study. *Social Science & Medicine*. 2012; 74(6):907-914.
6. Patterson A, Veenstra G. Loneliness and risk of mortality: A longitudinal investigation in Alameda County, California. *Social Science & Medicine*. 2010; 71(1):181-186.
7. Shiovitz-Ezra S, Ayalon L. Situational versus chronic loneliness as risk factors for all-cause mortality. *Int Psychogeriatr*. 2009; 22(03):455.
8. Tilvis R, Laitala V, Routasalo P, Pitkala K. Suffering from Loneliness Indicates Significant Mortality Risk of Older People. *Journal of Aging Research*. 2011; 2011:1-5.
9. Pitkala K, Routasalo P, Kautiainen H, Tilvis R. Effects of Psychosocial Group Rehabilitation on Health, Use of Health Care Services, and Mortality of Older Persons Suffering From Loneliness: A Randomized, Controlled Trial. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*. 2009; 64A(7):792-800.
10. Capalb D, O'Halloran P, Liamputtong P. Why older people engage in physical activity: an exploratory study of participants in a community-based walking program. *Australian Journal of Primary Health*. 2014; 20(1):74.
11. Robertson M. Effectiveness and economic evaluation of a nurse delivered home exercise programme to prevent falls. 2: Controlled trial in multiple centres. *BMJ*. 2001; 322(7288):701-701.
12. Routasalo P, Tilvis R, Kautiainen H, Pitkala K. Effects of psychosocial group rehabilitation on social functioning, loneliness and well-being of lonely, older people: randomized controlled trial. *Journal of Advanced Nursing*. 2009; 65(2):297-305.
13. McAuley E, Blissmer B, Marquez D, Jerome G, Kramer A, Katula J. Social Relations, Physical Activity, and Well-Being in Older Adults. *Preventive Medicine*. 2000; 31(5):608-617.
14. Mick P, Kawachi I, Lin F. The Association between Hearing Loss and Social Isolation in Older Adults. *Otolaryngology -- Head and Neck Surgery*. 2014; 150(3):378-384.
15. Lin F, Ferrucci L. Hearing Loss and Falls Among Older Adults in the United States. *Arch Intern Med*. 2012; 172(4):369.