



A Chorus for Caregivers

The impact of an intergenerational choir on family caregivers for persons with dementia

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Introduction

There are 50 million people in the world living with dementia¹, including 402,000 Canadians². Dementia is a range of neurodegenerative diseases affecting cognitive functions such as memory, communication and mood regulation¹. Extra supports are often needed for persons with dementia (PwD) to help with activities of daily living and to maintain safety, and in most cases (85%), they rely on a family member (usually a spouse or adult child) or a friend for caregiving support¹⁰.

Informal (i.e. unpaid) caregiving is demanding and, at times, burdensome². Symptoms of caregiver stress include social withdrawal, anxiety and depression, exhaustion, irritability, and illness¹. With an aging population in Canada, family caregivers are growing in importance, and supports are needed to prevent caregiver burnout. Music-based programs are a promising intervention for PwD that may decrease anxiety and depression, improve behavioural and psychological symptoms, retain speech and language, and improve quality of life¹¹. Similarly, caregivers may benefit from participation in a choir by meeting other caregivers in a similar context and receiving respite, while engaging in a joyful activity with their family member^(3, 8). However, there is minimal research in studying the impact of music-based interventions on caregivers.



Mary Peters and Rita Goodman singing with the ViM choir. (2018). Photo by S. Ahearne, UVic

The purpose of this study was to investigate the impact of participation in an intergenerational choir on caregiver burden and risk for depression on family caregivers of PwD.

Methods

Design

- Mixed methods design
- Burst-measurement design (every month over the 12 week choir season) with an initial assessment and 3 follow-up assessments.
- UVic ethics approval

Data Analysis

- Descriptive analyses of quantitative data were conducted using SPSS v. 24.
- Qualitative data obtained through semi-structured interviews were recorded and transcribed verbatim.

Measures

- Caregiver distress:** Zarit Burden Interview 12-item⁴ (likert-type screening tool). Scores: 0-10 none to mild burden; 10-20 mild-moderate burden; > 20 high burden.
- Depressive symptoms:** Patient Health Questionnaire 9-item⁶ (likert-type survey). Scores: 0-4 no symptoms; 5-9 minimal symptoms; 10-14 minor depression; 15-19 major depression (moderate); ≥ 20 major depression (severe).

Sample (Table 1)

- Purposive sampling
- The mean age of caregivers was 68 years and 69% were female
- The most common relationship was spousal (61%), although one-third (31%) were adult children

Table 1 Demographics	N = 13
Mean age (years)	68.4 (57-81)
Sex	
Female	69.2%
Relationship to PwD	
Spouse	61%
Child	31%
Friend	8%
Amount of time caring for PwD (years)	
< 1	23.1%
1-3	23.1%
4-6	30.8%
7-10	15.4%
> 10	7.6%
Lives with PwD	76.9%

Results

Quantitative

Over the 12 weeks of participating in the choir, there was a decrease in both caregiver distress (as determined by the Zarit-12 measure⁴) and depressive symptoms (PHQ-9⁶). Caregiver distress scores decreased sequentially at each follow-up assessment, indicating lower levels of caregiver burden (Figure 1). From initial to final assessments, depressive symptoms decreased by 68% (Figure 2).

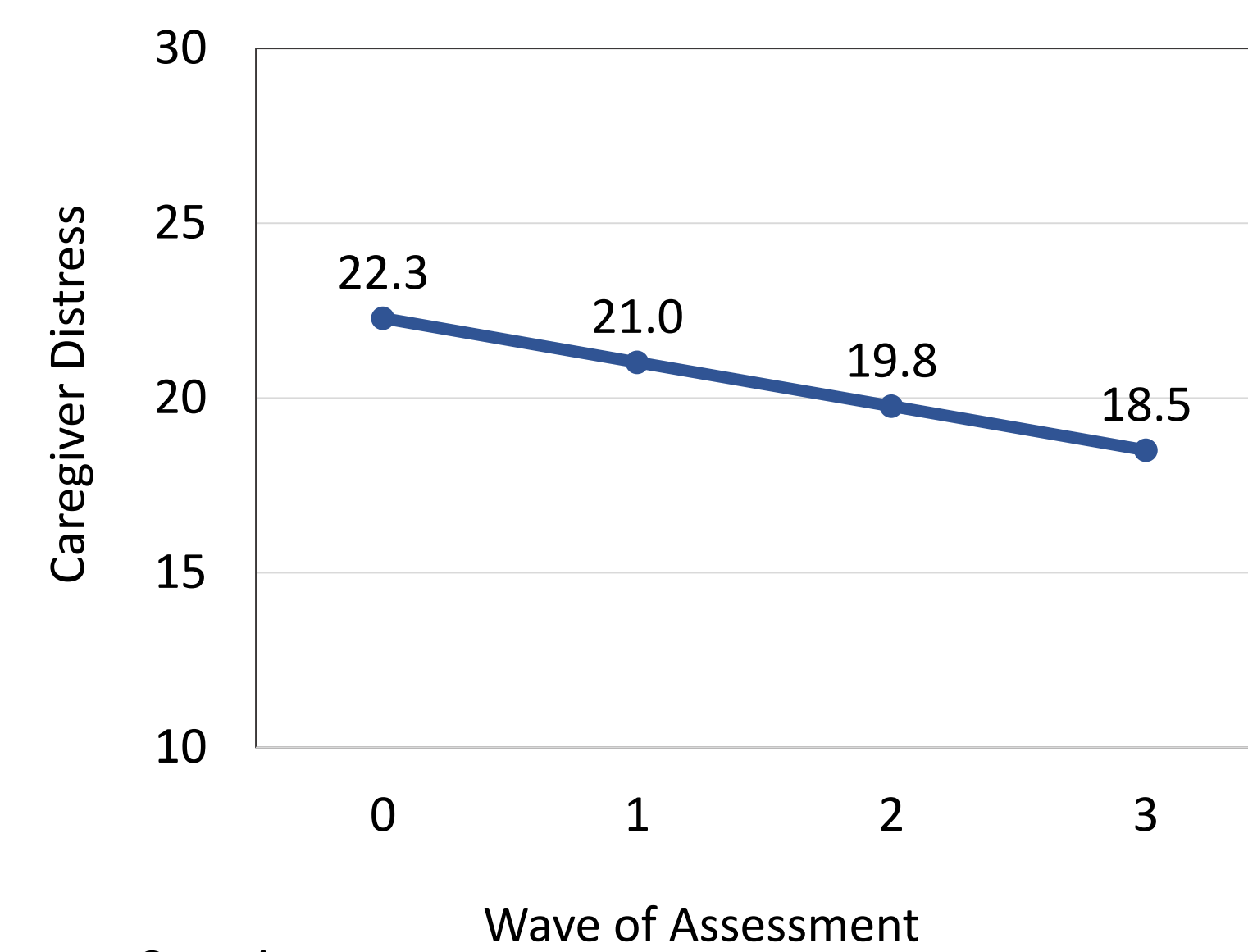


Figure 1. Trends in caregiver distress with participation in ViM choir

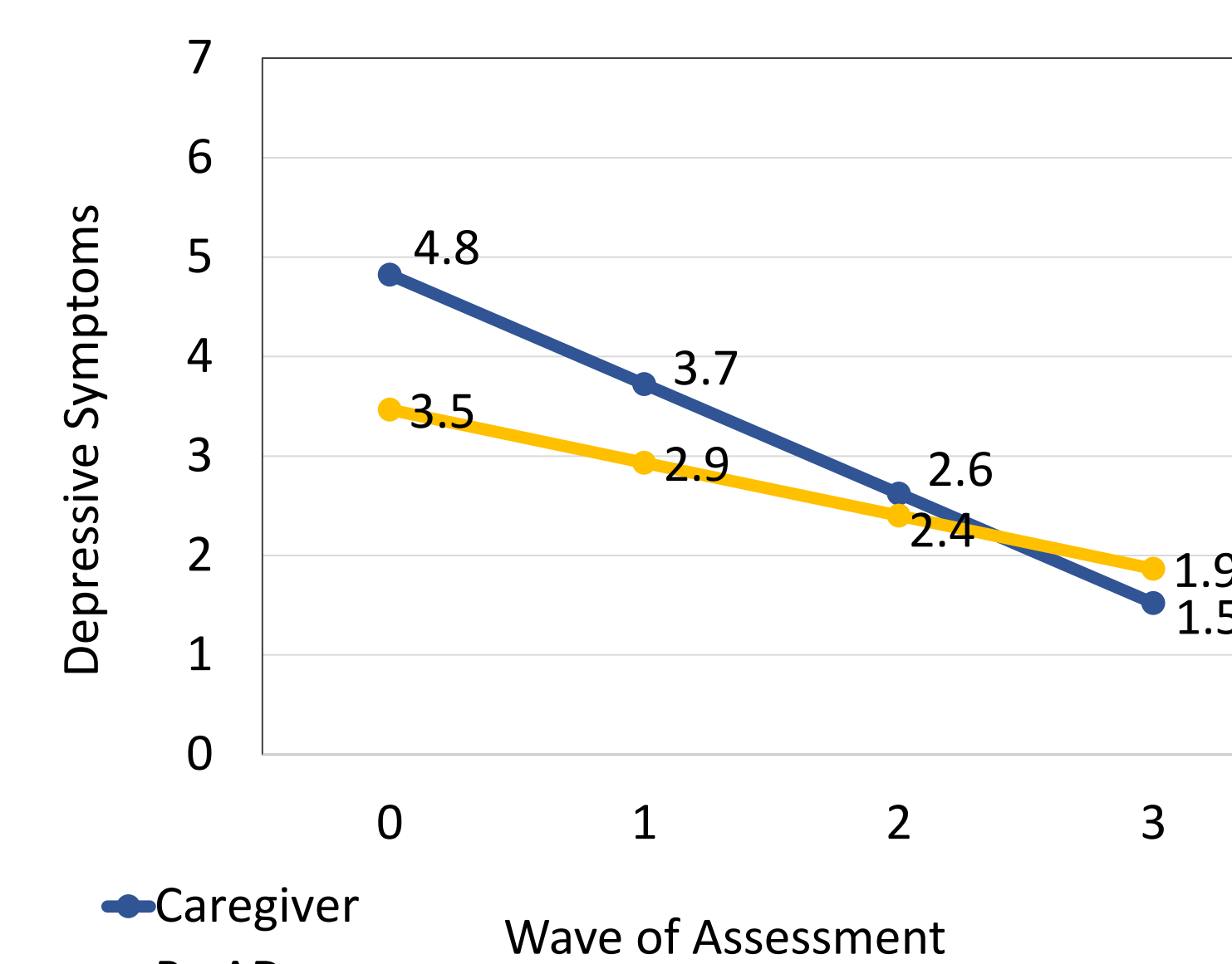


Figure 2. Symptoms of depression with participation in ViM choir

Qualitative

Positive Mood

During the interviews, caregivers expressed their positive attitudes towards the intergenerational choir and how it improved their mood.

"That's definitely a positive thing about [the choir]. You feel better afterwards no matter how you feel before you go there (laughing)."

Quality Time

The choir provided a shared space for the dyads to experience music and spend time together as equals.

"Yeah I mean that's the thing we get to spend quality time together doing something you really like ... even if you don't sit together at the choir it doesn't matter you still have that common experience."

Social Connections

The choir enhanced a sense of social connection to other dyads in the group.

"Because we were kind of... feeling left out of everything with healthcare and so this gave us an opportunity to do something we haven't done ... I haven't done in a long time. And I think from a social standpoint it was good for both of us."

Discussion

Results showed that participation in the choir reduced both caregiver distress and depressive symptoms. This finding fits well with the literature on caregiver support groups which are effective in decreasing caregiver depression and burden⁵. As well, music interventions have demonstrated some effectiveness in decreasing caregiver psychological distress and improving wellbeing⁷. The inclusivity of an intergenerational choir (dyad participation) provides both social interaction and music intervention, and initial results demonstrate a decrease in depressive symptoms and distress.

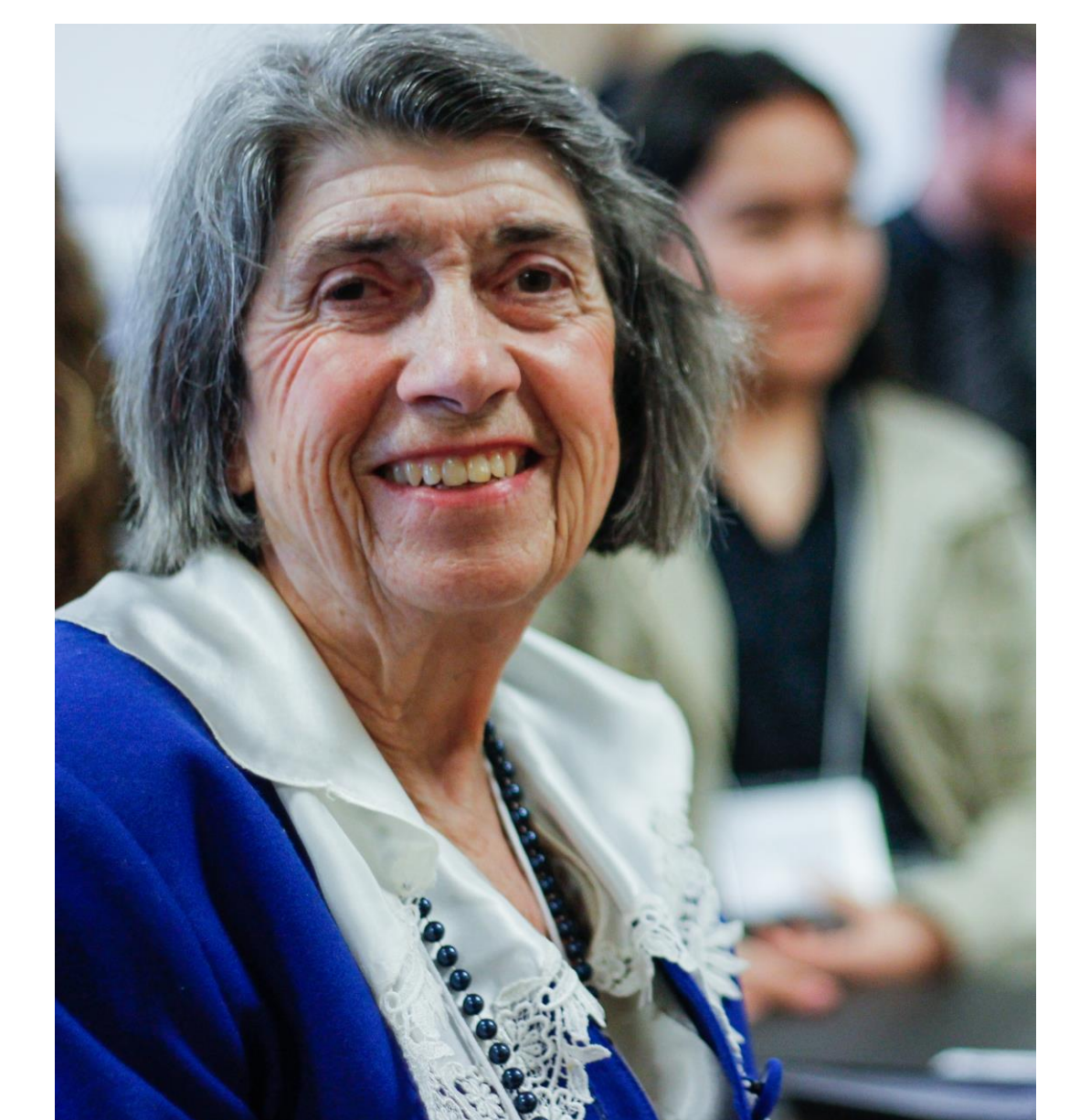
The intergenerational choir provided a space for both caregivers and PwD to build social connections with other dyads, as well as with high-school students. Dementia can be an isolating disease. By participating in social activities, caregivers can build new and meaningful connections with others⁸. As well, music interventions can enhance dyad relationships by providing a shared space to spend quality time together^(3, 8). This has potential to improve the outcomes for those in the caregiving role by reducing the risk of caregiver burnout⁸.



The Choir Singing. (2018). Photo by Cindy MacDonald, UVic.

Key Findings

- Initial findings demonstrate the potential of an intergenerational choir to improve caregiver wellbeing by:
 - Fostering social connections
 - Improving caregiver-PwD relations
 - Decreasing caregiver distress and depressive symptoms
- Canada's population is aging and living in an over-burdened healthcare system. Music intervention and community groups have the potential to help PwD live at home and delay institutionalization by supporting caregivers



Smiles in Song. (2018). Photo by S. Ahearne, UVic.

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