Musical Connections
A Descriptive Study of Community-Based Choirs for Persons with Dementia and their Caregivers

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Introduction
Dementia refers to a group of disorders that affect memory and thinking. As of 2016, the estimated prevalence of dementia for Canadians was 564,000; by 2031, this number is projected to grow to 937,000 Canadians.1 As dementia progresses, persons with dementia (PwD) experience worsening disability which has a physical, psychological, social and economic impact on both the PwD and their family caregivers (CGs).2,3 Non-pharmacological interventions for PwD have been available to maintain or improve function in ADLs and cognition, reduce behavioural symptoms and reduce CG burden.5,6

Choral singing is a new approach to non-pharmacological therapy and is garnering increased interest as a result of several pilot studies.7-9 As PwD and CGs participate, they have the opportunity to engage in a meaningful activity and benefit from social engagement.9,10 In addition, choral singing is a physical activity that involves the whole body (e.g., muscleskeletal, respiratory) as well as the senses (vision, hearing, balance and touch).7,11 Interventions that include mild to moderate physical exercises have also shown improvements in behavioural symptoms, performance of daily living activities, quality of life, and reinforced positive sense of self, as well as reducing CG burden.4,5 6,12

Purpose
The purpose of this study was to describe existing community-based choirs for PwD and their CGs. Although there is growing interest in choirs for PwD and a number of publications, to our knowledge there has been no effort to compare and contrast these choirs in terms of their structure, programs, and other factors. Thus it is timely and important to gather information about these choirs and their perceived benefits as well as lessons learned

Objectives
1) Describe the key characteristics of the choirs (e.g., purpose, program structures, sources of support/funding).
2) Explore the challenges and successes, as well as the benefits to participants.

Methods
Sample
A convenience sample of 6 community based choirs for PwD and their family CGs were recruited using email contacts from an internet search. Eligibility criteria included: 1) professionally organized choir (i.e., not music therapy); 2) program targeting PwD and CGs; 3) community based, choirs (participants are living at home) and 4) English Speaking.

Data Collection
Semi-structured phone interviews were conducted with administrators of the choirs. Conversations were audio recorded and transcribed. Ethics approval was received from the University of Victoria and all participants provided written consent prior to participation in the study.

Analysis
Transcriptions of the interviews were coded in a Microsoft Excel database and descriptive analyses were completed to address the objectives of the study.

Results
Table 1. Summary of choirs’ locations and size

<table>
<thead>
<tr>
<th>Choir Name</th>
<th>Location</th>
<th>Size</th>
<th>Duration</th>
<th>Focus</th>
<th>CGs Support</th>
<th>Funding</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circle of Music</td>
<td>Victoria</td>
<td>60</td>
<td>8 months</td>
<td>Church</td>
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<td>None</td>
<td><a href="mailto:posterpresenter@gmail.com">posterpresenter@gmail.com</a></td>
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<td>40</td>
<td>6 months</td>
<td>Church</td>
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<td>30</td>
<td>6 months</td>
<td>Church</td>
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</tr>
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<td>15</td>
<td>6 months</td>
<td>Church</td>
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Table 2. Table of program structures

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<tr>
<th>Choir Name</th>
<th>Structure</th>
<th>Intake</th>
<th>Independence</th>
<th>Training</th>
<th>Membership</th>
<th>Membership Type</th>
<th>Funding</th>
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<tr>
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<td>yes</td>
<td>Non-Native</td>
<td>yes</td>
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Discussion
Findings from our interviews suggest that choral programs improve the quality of life of PwD and CGs and can be initiated at a low cost with volunteer support. Our findings fit well with the limited studies available, showing that PwD have the capacity to be engaged, learn new songs, and show enjoyment in choir participation.6,10 From these results we see that PwD are able to contribute to a professionally led choir and participate in public performance. The benefits of the choir extend to CGs by offering respite that may allow them to continue in their role for longer and allow them to develop connections with other CGs who understand their experience. The benefits for CGs was also seen in the literature.4,12

Limitations
This is a descriptive pilot study with a small sample size. Therefore additional programs which we were not able to contact due to time and resource limits.

Conclusion
A community-based choir provides a valuable opportunity for both PwD and CGs to share an enjoyable activity in a supportive setting. Suggestions for future research include using a randomized control trial that will allow comparison of the impact and benefits of the choir versus other interventions (e.g., exercise) for PwD and their CGs.

Acknowledgements
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References