Applying Tai Chi for Memory program to Older Adults at High Risk for Dementia

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Introduction

- Tai Chi as a mind-body exercise has been introduced to those with various health problems, and getting more attention from health professionals for its health benefits.
- An adapted form of Tai Chi can be applied to those with impaired cognitive function, focusing on physical and cognitive functioning and quality of life.

Study Aims

- The purpose of this study was to explore the feasibility of Tai Chi based health promotion program specifically developed for older adults at high risk for dementia for 3 months, and to examine its effects on mobility, balance, cognitive function, and quality of life.

Methods

- Feasibility study with one group pretest-posttest design
- Approved by the institutional review board
- Potential subjects invited from two community health centers located in rural area of South Korea.
- Tai Chi for memory program
  - Delivered twice a week for 60 minutes for 12weeks.
  - Safety monitoring during TCM training sessions.

Program features of Tai Chi for older adults at high risk for dementia

<table>
<thead>
<tr>
<th>Principle</th>
<th>Tai Chi program</th>
<th>Outcomes</th>
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<tbody>
<tr>
<td>• Movement control</td>
<td>• Warming up 10mins</td>
<td>• Balance</td>
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<td>• Body structure</td>
<td>• Qigong 5-10mins</td>
<td>• Mobility (TUG)</td>
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<td>• Internal component</td>
<td>• Main exercise 20-30mins</td>
<td>• Cognitive function (MOCA-K)</td>
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<td>• Cool down 10mins</td>
<td>• Depression(GDS-K)</td>
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<td>• Quality of Life (SF-12)</td>
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Results

- Demographic of Participants (n=33)
  - 2 men, 31 women
  - Average age 78
  - Average attendance rate 78%
- Paired t-test indicated that older adults at high risk for dementia who participated in 78% of TC for memory program showed improved mobility (TUG, t=4.29, p<.001), improved cognitive function (MOCA-K, t=2.14, p=.039), and mental component of quality of life (SF-12, t=-2.88, p=.007).
- Balance and physical component of quality of life showed the tendency to improve but not statistical significant.

Conclusions

- Tai Chi has been safely applied to older adults who are at high risk for dementia for 12 weeks with no adverse effects.
- The program was well received by the participants.
- The study findings revealed the potential for Tai Chi as community health promotion program to improve physical and cognitive functioning and their quality of life. Further studies are warranted to examine the health benefits of Tai Chi in this population with randomized clinical trial and longer study period.

Acknowledgments

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