

## MEMORY RECOLLECTION PROGRAM OF DANCING

Sawami K

Nara Medical University, Japan

Kimura M<sup>1</sup>, Kitamura T<sup>1</sup>, Furusumi M<sup>1</sup>, Kawaguchi M<sup>1</sup>, Suishu C<sup>2</sup>, Morisaki N<sup>3</sup>, Hattori S<sup>4</sup>  
1 Nara Medical University, 2 Shubun University, 3 Himeji University, 4 Wakayama Medical University, Japan

### Abstract

**Introduction:** Since dementia has no effective drug therapy, it is necessary to accumulate evidence of preventive therapy. Therapies that have been considered effective include exercise therapies and delayed recall tasks. This time, we developed a new therapy combining dance, which is an aerobic exercise, and delayed recall tasks, and conducted a clinical trial with elderly people living in the local area.

**Method:** We recruited elderly people openly, and carried out a therapy combining dance and delayed recall tasks on them once a week, seven times total. We used the cognitive test which the National Police Agency uses for driver's license renewal in Japan. Those who get 76 or more scores are normal, and those who get the scores between 49 and 76 have mild cognitive impairment. And those who get less than 49 scores have cognitive decline. In order to compare the cognitive ability before and after the clinical trial, a paired t-test was used.

**Result:** Among 58 participants, we analyzed the data of 42 subjects who participated continuously and could have a paired t-test. The average age of subjects was  $70.5 \pm 5.9$  years old. 3 of them were males and 39 of them were females.

The average score increased from 88.0 to 94.6. The number of those who have normal cognitive functions increased from 37 to 41. The number of those who have mild cognitive impairments decreased from 5 to 1. The number of those who have dementia was 0 ( $p < 0.01$ ).

**Conclusion:** Since dancing is an aerobic exercise, it increases the cerebral blood flow rate and increases brain-derived neurotrophic factors. In addition, their memories were improved by adding memory tasks. As a result, 4 participants with cognitive impairment returned to normal evaluation scores. This is a very significant result. In the future, we would like to further increase the accuracy of the program and accumulate the necessary data to verify its efficacy.

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### Biography

Kazue Sawami of the presenter of this research is a professor at Nara Medical University. Her Ph.D. acquisition is a health science, and the recent study is the prevention of dementia in elderly people. Research currently being developed is the intervention by artificial intelligence, and support of the elderly by the information equipment remote control system. Results of their research group can be viewed at the following address. <http://www.g-nursing.com/katsudou.php>

Email ID: sawami@naramed-u.ac.jp

Presenter Name: Sawami K.

Type of Presentation: E - Poster

Contact Number: + 81-744-22-3051

