Verification of skill improvement of Dementia prevention supporters

Kazue Sawami, Mitsuo Kimura, Masahiko Kawaguchi, Tetsuro Kitamura, Mihoko Furusumi, Chizuko Suishu, Naoko Morisaki and Sonomi Hattori

Nara Medical University, Japan

Background:

Since the number of people with Mild Cognitive Impairment, whose cognitive functioning can be expected to recover, is increasing every year, dementia prevention measures targeting such individuals are of high social significance. With regard to dementia prevention measures, participation in social, intellectual, and productive activities has been shown to be effective1-3), and while such activities need to be provided, given that there is only a limited number of people who can provide these activities, we are faced with the challenge of increasing such individuals.

At the same time, since it has been shown that these measures are more effective when used as an integrated program than as separate techniques, the provider must gain mastery of all these therapies and, furthermore, be able to assemble and implement these techniques as an integrated program4-5).

As such, last year, we held a course to train supporters to prevent dementia, and as an interim report, we announced a significant improvement in the evaluation of the participants' skills. Since then, the supporters have completed a year of training and have acquired even more skills to support the elderly. This article shows the contents of their activities and the results of their verification.

Subsequent course

After completion the one-year training, the participants started the activity as "dementia prevention supporters". Six months after the completion of the training, an Advanced Workshop was held with local residents to report on activities for dementia prevention. At the workshop, we were able to exchange opinions on dementia prevention, and this led to an increase in the awareness of the residents and motivation for the supporters to take part in such activities.

Previous studies on the effects of such activities reported that increased awareness of these activities led to increased revitalization of the activities per se6), allowing these activities to develop spontaneously, and the same effects were also found in this activity. In addition, this workshop was able to widely inform local residents, which led to increased requests for supporters and expanded opportunities for activities.

Preliminary survey for the elderly living alone

When the supporter activities were initially started, we interviewed the elderly citizens who lived alone and obtained from received the following comments: "There are days when I don't talk to anyone", "I rarely do physical activities", "I am anxious about dementia because of how monotonous life will be", "I don't have anyone nearby to rely on", and "I am anxious when I get sick

or when dementia progresses".It was shown that there was such a common anxiety.

Results of the activities

With the support of the Dementia Prevention Support Network Association, we have started visiting the homes of elderly citizens for dementia prevention. The following is an interim report on the activities that are still in progress.

There were 29 subjects, 8 males, and 21 females, with an average age of 79.5 ± 4.95 . The maximum score for the cognitive test is 10. Immediate playback was improved from 5.5 points to 8.1 points (p <0.01), and delayed playback was improved from 4.7 points to 7.5 points (p <0.01).

Discussion and conclusion

Training for supporters in dementia prevention significantly improved skills related to dementia prevention and also increased the ability to apply these skills in practice. The range of regional activities for supporters is expanding. The older adults who had difficulty going out were characterized by low activity and few opportunities for conversation. If elderly people who have difficulties going out are left in their current situation, their mental and physical abilities will decrease. Not talking to anyone all day is a big problem, and it has been confirmed that people who interact with others less than once per week have an about 1.4 times higher risk of getting dementia than people who interact with others every day7). People who have only limited social interactions are more likely to die early8,9), and have a low sense of purpose in life 10), high levels of anxiety 11), and a high risk of developing dementia 12). Efforts to address this issue are lagging, and the only current solution is to rely on the helpof volunteers.

In response to this problem, supporters can greatly increase the amount of communication of elderly people. Encouraging conversation and interaction improves health 13-15), affects the length of the remaining life span 16), and prevents depression17).

Increased conversation and improved activity through the visits of the supporters affected the older adults' minds and bodies, as well as significantly improved their cognitive function. Deeper interaction between the supporters and the older adults at home would further enhance the effects of these activities.

Issues in the future

A series of activities were suspended in March 2020 to prevent COVID -19. At present, the number of people who can participate in this activity is limited to 30% and it has been resumed, but a new way of activity is being sought.

Reference

- 1. Scarmeas N, Levy G, et al. Influence of leisure activity on the incidence of Alzheimer's disease. Neurology. 2001;57(12):2236-2242.
- 2. Verghese J, Lipton RB, et al. Leisure activities and the risk of dementia in the elderly. The New England journal of medicine. 2003;348(25):2508-2516.
- 3. Wang HX, Karp A, et al. Late-life engagement in social and leisure activities is associated with a decreased risk of dementia: a longitudinal study from the Kungsholmen project. American journal of epidemiology. 2002;155(12):1081-1087.
- 4. Ngandu T, Lehtisalo J, et al. A 2 year multidomain intervention of diet, exercise, cognitive training, and vascular risk monitoring versus control to prevent cognitive decline in at-risk elderly people (FINGER): a randomised controlled trial. Lancet.2015;385(9984):2255-2263.
- 5. Barnes DE, Santos-Modesitt W, et al. The Mental Activity and eXercise(MAX)trial: arandomized controlled trial to enhance cognitive function in older adults. JAMA Intern Med.2013;173(9):797-804.
- 6. Kuronuma G, Shimura H.Effect of collaborative village supporting activity focusing on action and consciousness change of inhabitants. Journal of Architecture and Planning. 2011;76(669):2109-2116.
- 7. Saito M, Kondo K, et al. Different association between the loss ofhealthy life expectancy and social isolation by life satisfaction amongolder people: A four-year follow-up study of AGES project. JapaneseJournal of Gerontology. 2013;35: 331-341.
- 8. Aida J, Kondo K, et al. Assessing the association between all-causemortality and multiple aspects of individual social capital among theolder Japanese. BMC Public Health. 2011;25;1-16.

- 9. Saito M, Kondo N, et al. Gender Differences on the Impacts of SocialExclusion on Mortality among Older Japanese: AGES Cohort Study. Social Science & Medicine. 2012;75: 940-945.
- 10. Cabinet Office. Survey on the willingness of the elderly to participate in the community. 2009 edition. Cabinet Office, Government of Japan. 2009:1-29.
- 11. Kobayashi E, Fujiwara Y, et al. Social support availability andpsychological well-being among the socially isolated elderlyDifferences by living arrangement and gender. Japanese Journal OfPublic Health. 2011;58: 446-456.
- 12. Saczynski J, Pfeifer L, et al. The effect of social engagement onincident dementia: the Honolulu-Asia Aging Study. American journal of epidemiology. 2006;163: 433-440.
- 13. Martin L. Marital status, social capital, material conditions and selfratedhealth: A population-based study. Health Policy. 2009;93: 172-179.
- 14. Gerry V, Isaac L, et al. Who you know, where you live:socialcapital, neighborhood and health. Social Science & Medicine2005;60:2799-2818
- 15. Orma BE, Ruth W, et al. Individual-level analysis of social capitaland health: A comparison of Arab and Jewish Israelis. Social Science& Medicine 2008;66:900-910
- 16. Anme T, Shinohara R, et al. Social interaction and mortality: Aseven year longitudinal study of elderly people. Japanese Journal OfPublic Health. 2006;53: 681-687.
- 17. Misawa J, Kondo K. Social factors relating to depression among olderpeople in Japan: analysis of longitudinal panel data from the AGESproject, Aging & Mental Health. 2019;23: 1423-1432.