PAPER

Cognition, Dementia, and Intervention

Y.R. PARK, K.S. PARK, S.Y. HONG. The effectiveness of social activity model for dementia prevention and the needs for developing smart care programs in Korea. Gerontechnology 2018;17(Suppl):73s; https://doi.org/10.4017/gt.2018.17.s.073.00 **Purpose** South Korea is fast aging, and the number of elderly people in Korea comprised 13.6% of its total population in 2016[1]. Among all households, 11.6% consisted solely of seniors, and more than half of them consisted of seniors living on their own. Moreover, 9.6% of the elderly population are estimated to have dementia, and the figure is expected to reach 15% by 2050. In this context, there is an increasing demand for gerontechnology to meet the challenges of rapid aging in Korea. South Korea has one of the most advanced ICT infrastructures and human resources. However, in the field of aging services including dementia prevention, there is a shortage of research and development for smart care programs. The purpose of this paper is to report the effectiveness of a social activity model for dementia prevention which has been developed and implemented in more than sixty senior centers in Korea since 2014. This paper will discuss the implications and the needs for developing gerontechnology to enhance the effectiveness and efficiency of the preventive services for older people with risks for dementia. **Method** Data from the pre- and post-tests of the approximately 900 participants in the 'KB Good Memory School' which was implemented in the senior centers in local communities was analyzed (*Figure 1*). Variable on cognitive function, physical health, life satisfaction, physical activities were included in the survey. **Results & Discussion** The results showed that program participations had statistically significant changes in positive directions in most of the indicators such as subjective health (from 2.74 to 3.23), balanced nutrition intake (from 36.13 to 38.06), stress (from 2.05 to 1.84), memory deterioration (from 70.6% to 39.7%), social activity participation (from 3.49 to 3.90), life satisfaction (from 3.46 to 3.85), depression (from 5.40 to 3.57), knowledge about dementia (from 9.32 to 10.03), MMSE (from 23 to 24.53). Social relationship and activities embedded in the program seems to have made a difference in the physical, psychological and cognitive function of the participants. Limited utilization of ICT has been an issue for the service providers in the beginning stage dementia prevention programs at the senior centers. Further development of technology is needed in order to disseminate dementia prevention programs to more senior centers and manage the programs and the field data more efficiently.

References
1. National Statistical Office. 2017 Statistics on Older Population. 2017

Figure 1. Pre- and post-tests in the 'KB Good Memory School'