

Research on Training Contents to Prevent Dementia

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1. Introduction

Dementia is known as irreversible disease up to now, which means that once if a patient is judged by medical doctor as dementia, it is not able to cure or rehabilitate. Because of that, medical team and pharmaceutical company throughout the world have kept researching the method and medicine to cure dementia. In other hand, they are also researching about how they can shorten the term of dementia by extending the term of mild cognitive impairment, which is the previous step of it.

This research suggests the development project of contents that shortening the process of dementia by stimulating the elder's brain having mild cognitive impairment or still normal.

2. Habits affecting dementia

To divide the habits affecting our brain conditions in three, it would be eating habit, exercise habit, and life habit.

Good eating habit is important nutrients for brain health. Eating chocolate, kale, spinach and etc. which has rich scavengers are suggested and more importantly, eating food in season. Having meals three times a day in regular time is also important for brain health.

Exercise habit is also having important role for brain health. Walking, swimming, cycling and etc. are suggested for elders since those are the exercise stimulating their brain. By exercising, more nutrients and oxygen in blood inflows to the brain so that makes brain healthier.

Life habit is the habit of how you sleep and how you spend your daily life. Having comfortable sleeping 7 hours a day is very important for brain health same as proper rest. Sociality is necessary for the daytime, and it is suggested to use contents to stimulate the brain, for example, game.

Our interest is the contents that can stimulate the brain everyday in life habit..

3. Contents stimulating brain

Brain has seven functions of psychomotor speed, attention, linguistic ability, calculation ability, visuospatial function, memory, and executive ability. It has been reported that stimulating the brain makes above functions to accomplish so that can delay the atrophy of brain.

There are numerous brain-training contents developing and the most famous one is Lumosity. On-line brain training is possible at www.lumosity.com with monthly payment at \$10. Five games are given every day and three to four minutes are taken per game. Memory, problem processing speed, flexibility, problem solving, and attention functions of brain is in the problem bank in lumosity. Level of difficulty goes up according to user's ability to solve problems and the results are shown as percentile comparing to other users. Mobile application is available. Cotras(Cognitive Training System) was developed in Korea and all in one computer with touch screen is used. Visual perception, attention, memory, and orientation functions of brain are trained to stimulate. CoCoTA(Computerized Cognitive Training Apparatus) is also brain training program and combination of seven brain functions are devised by neurologists. Korean, English, Chinese, and Japanese versions are provided. Also both android and iOS users can enjoy the program.

4. Conclusions

Many computerized contents has been and are developing recently. We should know that using this brain stimulating contents may not contribute to prevent dementia much, because maintaining good eating, exercise, and life habits is basic and important brain stimulating method and the program is a part of life habit. But every day brain-training makes the elders more positive and this will change every day life pattern.

The development of the convenient and proper computerized contents should be validated and verified at the hospital and it will be important to make confident to users.

5. References

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