

MEMOHELP, HELP FOR SELF - HELPING AGAINST AGE IMPAIRMENT OF MEMORY

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Abstract: MemoHELP is an innovative, pilot and prevention program that introduces new approaches for solving the problem of weakening memory and consequently declines mental and physical health among old people. Usually we are resolving problems with our memory, when the memory is so bad that we are talking about chronically failure of brain functions, which is for instance a dementia. If we want to be effective, we should start earlier. It is well known, that it is decline in memory natural phenomenon, but now we also know, that it is possible to resist it. In year 2012 Univerzum Minerva took an active role in field of helping old people to strengthen their memory before their memory started weaken. We started program MemoHELP. The program MemoHELP carries out an exceptional value for old people, because the problems which are associated with memory decline in the elderly are complex and lead to depression, individual alienation of the surroundings and also in the end patients cannot take care for themselves. Consequently that means a huge burden for families who take care for the elderly with bad memory and also big burden for whole society. MemoHELP program is enabling old people to use their brains and that is how they can reduce the likelihood of disease or dementia and helps to postpone the start of dementia. MemoHELP program now adds value to tackling the problem of weakening memory and mental and physical problems that arise as a result of weakening memory.

Key words: memory, elderly, dementia, impairment of memory

MemoHELP – SAMOPOMOČ OB STAROSTNEMU PEŠANJU SPOMINA

Povzetek: MemoHELP je inovativen, pilotno preventivni program, ki uvaja nove pristope in tehnike za reševanje problema pešanja spomina in posledično krepi duševno in telesno zdravje med starejšim odraslimi. Po navadi posvetimo pozornost reševanju težav s spominom, ko je spomin že tako slab, da govorimo o kronični okvari možganskih funkcij (demenca...). Vendar, če želimo biti učinkoviti, moramo začeti že prej. Znano je, da je pri ljudeh upad spominskih funkcij naravni pojav, vendar sedaj obstajajo tudi znanstvene podlage, da se je temu možno upreti. V letu 2012 je Univerzum Minerva pričela z aktivno akcijo MemoHELP – pomoč proti pešanju spomina. V okviru programa so bili starejši, populacija ljudi nad 65 let, osveščeni, kako naj okrepijo spomin, še preden bo njihov spomin začel slabeti. Težave, ki so povezane z upadom spominskih funkcij, namreč lahko vodijo v depresijo, individualno odtujenost od okolice in v končni fazi bolniki ne morejo niti poskrbeti zase. Posledično to pomeni tudi veliko čustveno in finančno breme za družine, ki skrbijo za starejše s slabim spominom in tudi veliko breme za celotno družbo. Program MemoHELP omogoča starejšim odraslim, da čim dlje uporabljajo svoje možgane in, da zmanjšajo verjetnost pojava demence oziroma se odloži začetek demence na kasnejše obdobje. Program MemoHELP je tako dodatna vrednost za reševanje problema slabega

spomina in mentalnih ter fizičnih težav, ki nastanejo kot posledica slabitve spominskih funkcij v starosti.

Ključne besede: spomin, starejši, demenca, pešanje spomina

1. Introduction

In 2013 there were estimated 44.4 million people with dementia worldwide. Unfortunately, international statistics made by Alzheimer's Disease International (ADI), are showing that this number will increase to an estimated 75.6 million in 2030, and 135.5 million in 2050. Much of the increase will be in developing countries. Already 62% of people with dementia live in developing countries, but by 2050 this will rise to 71%. The fastest growth in the elderly population is taking place in China, India, and their south Asian and western Pacific neighbours. The total estimated worldwide cost of dementia was US\$ 604 billion in 2010 (AZ international, 2013). Also World Health Organization (2013) putted some interesting facts; like that people live for many years after the onset of dementia symptoms. With appropriate support, many can and should be enabled to continue to engage and contribute within society and have a good quality of life. They say that dementia is overwhelming for the caregivers and adequate support is required for them from the health, social, financial and legal systems. This is also why we need to take action, before this becomes a "pandemic" situation. All this terrible data and all these numbers and facts in our surroundings put Univerzum Minerva on a way of prevention of an age and memory which leads to various forms of dementia or other diseases of the brain. We have the knowledge, experience and high quality partners. We also obtained financial support from the Swiss contribution fund for Slovenia. Therefore, we were able to develop a unique program, MemoHELP.

2. Health is a personal or society responsibility?

Health is a personal and also social responsibility. Every individual is responsible for its health, but society should also motivate us to healthier lifestyles. Univerzum Minerva took part in solving problems with bad memory. We developed the program MemoHELP (Cokan, Jus, 2012). The MemoHELP program is an innovative pilot prevention project that introduces new approaches for solving the problem of weakening memory and declining mental and physical health among older people. Currently, we are resolving problems with memory when the memory is so bad that we are talking about chronic failure of brain functions known as dementia. Decline in memory is a natural phenomenon, but it is possible to resist it with studies based on known results of systematic and proper training, or at least prolong the period before dementia occurs, which can be very helpful for the quality of life of older people. We may become aware of memory dysfunctions by ourselves, or people close to us make us aware of it. The best thing for our brain that we can do is to take part in the prevention program which can help us to improve our memory. This helps us to stay fit in our older period of life. MemoHELP is giving the solution to that. Sometimes we just need encouragement, that we are able to do it and that it is not as difficult as we thought it would be. Usually we say that no one can take away our memories. However, different types of mental diseases can take our memories away. Among all we are able to recognize a large number of conditions which cause the symptoms of dementia as a result of changes that happen in the brain and the ultimate loss of nerve cells (neurons). The most common causes are: Alzheimer's disease, vascular dementia, Dementia with Lewy bodies and Fronto-temporal dementia (including Pick's disease). The boundaries between the different types are not necessarily distinct. Alzheimer's disease and vascular dementia are responsible for up to 90% of cases of dementia. What all types of dementia and other brain diseases have in common is that we do not know the cure yet (AZ international, 2013). We need to be systematically addressed to prevent memory decline, because that is the only medicine against this disease. Prevention will protect against this serious and insidious disease. However, it is also good to gather as much information as we can. That is how we can also help others. We should pay attention to all signs that indicate that we or our neighbours are on the road to dementia. Then we should be more careful and even more intense in combat to bad memory. Symptoms vary between Alzheimer's disease and other types of dementia, but we can see some similarities between them. The most common signs are memory loss and the loss of practical abilities, which can lead to withdrawal from work or social activities. The most common early symptoms of dementia are: memory loss, difficulty performing familiar tasks, problems with language, disorientation in time and place, poor or decreased judgement, problems with keeping track of things, misplacing things, changes in mood or behaviour, changes in personality or loss of initiative. If you think that these problems are affecting your daily life, or the life of someone you know, it is important that you should talk to the doctor. It is also important that we are aware, that also young people can have bad memory and be diagnosed with dementia.

3. Dementia in Slovenia

In Slovenia we have to deal with the emergence of over - aged population (Malačič, 2003), which also leads to the fact that more and more old people are sick. In Slovenia, dementia affects per year about 6,000 new patients in the age of 65. Their number will continue to grow more rapidly due to the increased number of older people and the longer life expectancy. For example in year 2012 were costs of treatment for people with dementia in Slovenia nearly 200.000 mio EUR. On the other hand also the European Commission is clearly aware of the aging population and the consequent problems related to the weakening of memory and dementia. Because of that the Commission has adopted the Communication from the Commission COM (2009) 380/4 to the European Parliament and the Council on a European initiative on Alzheimer's disease and other dementias.

4. Program MemoHELP

MemoHELP program enables older people in Slovenia to use their brains more and you reduce the likelihood of disease or dementia or occurrence of dementia rescheduled at a later time. The program MemoHELP includes people around the age of 65. Decline in memory does not affect only the elderly but also people who are close to them. People with dementia or weak memory are completely dependent on foreign aid and a burden to the local community. Those generally provide a secure accommodation; on the other hand chronic diseases that affect memory consume a lot of money medication and treatment.

We are too rarely aware that brains are like muscles and we can train it just as we train and maintain their body. For proper functioning brains need mental training to maintain good condition. We need constant exercise. We know that everyone eventually deals with normal forgetfulness, for example, when we come to the kitchen and forget what we've come for. Over time most people »meet« with dementia, because it is known as a disease of old age, the risk of it occurring increases with age. In this area prevention is far ahead of cure. Program MemoHELP raises awareness of older people to take care of them, before they are sick, before a sign of bad memory occurs and before they are unable to take care of themselves. Each individual must be aware that it is important to train their brains, so that it does not become lazy and ill. It is also very important to include into theoretical workshops also physical exercises. An example of integration of mental and physical exercise you can see on Figure 1.



Figure 1: Integration of mental and physical exercise

5. What is natural forgetting?

We must be aware that dementia is a chronic progressive brain disease that affects higher brain functions, which include memory, thinking, orientation, comprehension, calculation and learning skills as well as the ability to speak. Once we are affected by it, we cannot escape it. Therefore we can say that prevention is better than cure in case of decline of memory. In practice the program MemoHELP has embarked on the scientific literature, which is commercially available in this area. Authors considered the situation of brain activity in Slovenia and on that basis prepared a unique brain program for the entire country. The reaction was great. Workshops were distributed throughout Slovenia. A special guide book to train the brain of older people is prepared for all participants. This manual contains background documents and especially practical advice for every day. While the older participants in the workshops learn different techniques, they also improve their memory and pour confidence that their memory is not so waning and that they can really do something for themselves and their brain.

6. What is natural forgetting?

Elderly are highly motivated to work, especially those who have any kind of brain disease in their family. They are particularly interested in how to avoid bad memory, what are the exercises to prevent it, how often they need to perform them, what to eat and which other influential factors are there to improve the functioning of the brain. The program MemoHELP is conceived on universal level, it includes some of the universal exercises and principles and brings those closer to the knowledge of the user in such a way that each individual is choosing the exercise/principle that he needs. If we want to have brilliant results participants must be highly motivated. This can be done in such a way that they are promised to get immediate effects of improving their memory with everything the program MemoHELP has to offer. That is why individuals are divided into groups of different sizes and lecturer must also adapt to each individual. It is not surprising that interest in training workshops was focused for them to identify people names and faces. This is the thing that is in our awareness, in everyday life of every individual. We meet new people and people that we already know. In such cases it often happens that we cannot remember the name of someone that we meet. We do not know where to “put” certain faces. At that time we are embarrassed and we are looking for an excuse for our bad memory. That is the worst thing that we can do for our memory. That is why all participants in the workshops of the program MemoHELP are reminded that this is happening every day and that it can also happen to children. They can forget a name of a school friend... That is natural forgetting. Only if this forgetting happens more often, we can start to worry. In such cases brain training is necessary. Thus, we can avoid the scourge, it is important to use memorizing techniques, which emboldened us that we can remember more names than we have so far. It's easy to imagine our memories as a shy squirrel, which is most easily approached slowly and carefully by attracting it to ourselves. Sometimes we need more time to attract our memories, but with special techniques it is easier and also faster. So in most cases, it is a technique for quickly locating information successful and worthwhile effort.

7. Well trained memory

It is also important to recognize that we do not have poor memory. There is only memory that is not trained enough. We can say that our memory is a set of experiences that we gather, a set of places where we were, events that have occurred to us. We need to raise awareness that memory is not bad and that we are on the right track that we will never weaken completely. On this level it is very important, that we know that our brain responds to us. If we are stressed, we have problems with thinking, with remembering things... If we are telling ourselves that we have bad memory, the brain will also receive stimulation that we cannot remember new information. We are unable to memorise things. It is important to say: “I have a good memory and I want to train my brain.” It is an indescribable feeling when this sentence is spoken out by about 60 elderly people in the MemoHELP classroom. This gives MemoHELP lecturers extra energy to work. Upon completion of the MemoHELP program all the participants know at least four different techniques to memorize names and recall names from their memory. MemoHELP program also educates individuals on what to look out to easier memorise faces of people. People were very interesting in that kind of work, as you can see on Figure 2.



Figure 2: MemoHELP workshop in Maribor

8. Memorising numbers and random words

The MemoHELP workshops also emphasize the importance of remembering numbers. Same as names and faces, we can find numbers in daily life of every individual. Numbers are hard to remember, because they are seen as pure numbers, stripes and curbs. However, people are thinking in pictures and this is why it is so hard to remember numbers and mathematics. At the MemoHELP workshops participants learn to see numbers as pictures and they are looking for similarities. For instance number 2 looks like a duck. Number 3 reminds on devil villas, number 4 looks

like a chair, 5 is like a pirate hook, 6 is like a bomb and so on. Learning numbers suddenly becomes like a children's play. Elderly students make up different stories and that is how they remember the sequence of numbers. Simple sequence of numbers 23456 can be converted into a simple story: a swan was found near villas, which were leaning against the chair. When we stumbled on a chair we saw a pirate hook on the ceiling from which a bomb was hanging. Learning becomes fun. It is also great to activate people's minds. Fascinating what kind of stories we get out. Imagination is very important in memorizing, especially when we are learning numbers. In addition to this it is also very interesting to memorize different sequences. Older people often forget what they wanted to buy in a store. This can be really frustrating. Therefore, participants in the program MemoHELP are very happy when they are shown techniques with the help of which they can remember up to 15 things in a few minutes. After the MemoHELP workshop older people can go to the store without a written list of what they need to buy. It's simple and effective.

9. Memories are shy

The program MemoHELP is designed to help. We just need to be self aware and we can help ourselves and our memory. At the same time we can help others. Together we are creating the path to improve the memory. The MemoHELP program puts a great emphasis on the fact that people realize which influential factors can help to improve to remember information. People activate emotions at the workshop. Participants experience through laughter, sadness, joy, surprise... how to remember new information. Surroundings and especially motivation are also of great importance. Participants are enthusiastic about exaggeration. Exaggeration encourages different emotions and an emotional stimulus is sent to the brain. Now it is saved and prepared for recall. It is also very important that we tell older people to not tense the brain unnecessarily, as this only produce additional stress, which does not help them when they recall the "forgotten" data. As mentioned earlier, memories are similar to a very shy animal. We need to approach them with extreme caution and stroke. Memories cannot extort from the embrace of oblivion, but they are easier to elicit a trick or technique. It is also easier to invite a shy squirrel if you ignore it. It comes to us by itself. Forgotten memories or specific information can be understood in the same way. When we simply cannot recall something, do not bother too much. Do not hesitate. You should do something else entirely. It is the best to tackle some physical work to keep your mind and body busy. Such work is, for example, dusting, brisk walking or reading a book. And when we least expect it, we will get information that we were searching for. It is only a trick that someone should tell us. And we are in better mood and prepared for new challenges. With MemoHELP program organizers wanted to raise the awareness that brain training can also be simple and practically a routine. The program of self-help memory has covered basic information about brain function, nutrition, which affects brain function, learning the techniques of memorizing, learning about exercises to strengthen and train your memory. The program is structured so that the elderly can use this knowledge alone at home. It is important that we exercise regularly, alone or in company. MemoHELP effects are visible immediately. For people in public or other elderly homes it is important, that employees in elderly homes are familiar with MemoHELP exercises. One of the workshops for employees in elderly homes ou can see on Figure 3.



Figure 3: MemoHELP workshop for employees in elderly homes

10. MemoHELP is connecting people and organizations

In addition to mental exercise it is also important to take physical training. In this case it should be noted that the elderly can also be physically obstructed, but we must nevertheless prepare them, to carry out exercises for strength and muscle building. Mental and physical activities are closely associated. Under the MemoHELP program organizers cooperate with therapists who advise which exercises are suitable for the elder people and which are not. Organizers connected physical exercises with exercises that strengthen the left and right brain half. With such exercises we raise self-esteem and strengthen the functioning of the brain. Program MemoHELP also connected different organizations that are active in the field of the prevention of dementia or are working with the elderly and are experts in the brain area. Outpost to the following: Homes for the Elderly from Slovenia, Health centres, Hospitals, University Medical Centre (Ljubljana and Maribor), Society Spominčica, Society Sinapsa and others. To do well we all joined our forces and expertise. Now we can say that the MemoHELP program contributes to a worthy life, an active life for older people and their families, to the economic and social cohesion, to the provision of welfare services and strengthening of the non-governmental sector. MemoHELP also informs an older population about the problems of a weakening memory and give them the knowledge to mitigate and overcome these problems. MemoHELP enhances awareness of the importance of memory for older people in society and it is raising awareness of the media and the public about the importance of memory for the elderly. At the end we can say that the program MemoHELP wants to help elderly people to slow down decline in memory and to raise awareness that they may slow down the decline in memory with appropriate training and exercises and can postpone "getting a bad" memory and the onset of dementia.

Mental health is our responsibility.



Figure 4: Festival for the third age in Ljubljana

References

- Cokan, P., Jus, V. (2012), *Trening spomina po programu MemoHELP*. Univerzum Minerva, Maribor.
- Egidi, V. (2003), *Health status of older people*. Genus, Vol. LIX, No. 1, Roma.
- Malačič, J., (2003), *Staranje prebivalstva Slovenije po projekcijah prebivalstva 2001–2036; Naravna rast nasproti celotni rasti prebivalstva*. Zbornik 13. mednarodnega statističnega posvetovanja. Radenci.
- Pisk, N., več avtorjev (2011), *Samozdravljenje demence*. Slovensko farmacevtsko društvo, Ljubljana.
- Rajkovič, S. (2009), »Motnje spomina«. Medmrežje. Dostopno na <http://www.lekarna-velenje.si/farmacevt-svetuje/motnje-spomina/media/27.03.09.motnje.spomina.1.pdf>. (december.2013).
- Zelena knjiga: Odziv na demografske spremembe – nova solidarnost med generacijami(2005). Medmrežje: http://eur-lex.europa.eu/LexUriServ/site/sl/com/2005/com2005_0094sl01.pdf (januar, 2014)
- Staranje prebivalstva – izziv za Slovenijo. Medmrežje: <http://www.predsodovanje.si/Medgeneracijsko-sodelovanje-/Staranje-prebivalstva-izziv-za-Slovenijo.html>. (februar.2014).
- »Več bolnikov z demenco«. Medmrežje. <http://ljudmila.org/~zzppd/0912.pdf>. (januar 2014).
- AZ international, Medmrežje: <http://www.alz.co.uk/research/statistics> (februar 2014).