



Cognitive Rehabilitation in the Elderly

Computer games and Internet searches improve cognitive function

Often times, the elderly population is forgotten about or ignored and, after a brain injury, many may see rehabilitation as useless. Many seniors may be resistant to treatment. They potentially see any type of rehab as “mental” or “emotional” help and hold strong stigmas against the mentally ill (Perecman, 1992). Some experts doubt that retraining memory is viable. Dr. Rosamond Gianutsos, a rehabilitation specialist, challenged these views, arguing that significant change and improvement has been documented in the elderly population and rehabilitation should never be halted. When creating a treatment plan, whether at home or through rehabilitation professionals, Gianutsos says to remain realistic about one’s abilities, but to never aim too low (Gianutsos, 1986).

Identifying Barriers to Rehab Efforts

First things first, it is important to make sure that nothing is blocking input and therefore rehabilitation efforts. Input involves acquiring information about the world around us through senses. For example, it would involve gathering visual or sound information. Factors that may reduce the quality and quantity of input in the elderly make it difficult to integrate and store information in an accessible way. These factors can include but are not limited to hearing and vision problems and any condition making it difficult to communicate and speak effectively (Gianutsos, 1986). Addressing these problems to the best of one’s ability is essential for good rehabilitation. Other factors include conditions such as depression, confusion, psychopathological states, and physical illnesses that may cause a decline in one’s attention, concentration, and judgment. A simple toothache or stomach ache can interrupt input enough to decrease the value of good rehabilitation. Loss of regular work, income, and close family or friends can result in depression which may mimic or complicate dementia (Perecman, 1992). A further barrier to rehabilitation may be the attitudes of health care providers and support systems, underestimating the value of their efforts on elderly populations (Gianutsos, 1986). Identifying and treating these barriers may be essential before optimal rehabilitation can take place (but that doesn’t mean that *nothing* can be done. Never stop rehab). Talk to your doctor about helping these treating these problems.

Hospital Uses Modern Technology for Rehab

The Geriatric Clinic of Bellevue Hospital specializes in comprehensive mental and medical services for people over the age of 65. They designed a computer based rehabilitation program specifically for this special population where memory loss is the number one complaint. The computer program is quite simple and anyone can engage in a similar program on their own. Essentially, it was shown that participants who learned how to work on the computer maintained their new skills after the program ended and improvement on many tasks was recorded. Patients at the Bellevue Hospital reported a sense of satisfaction in being able to master an aspect of modern technology.

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Further benefits:

- The program is cost and time effective
- Performance records are automatically recorded
- It requires direct and active participation of the patient
- Workers or family can ask "how did you do that?" which encourages the patient to reflect upon their behaviour; helpful strategies are brought to awareness
- Workers or family can suggest helpful strategies
- Patient develops and practices strategies in a non-threatening environment, eventually reaching success
- Immediate computer feedback
- Tasks can be changed to different levels
- Patient experiences sense of control
- No stigma associated with "mental" or "emotional" help

What is cognitive rehabilitation? Rehabilitation "attempts to restore, alleviate, or compensate for losses in cognitive function". According to Dr. Ellen Porecman, a good rehab program should always address acute observation, concentration, attention, and language ability, ability to think logically and make comparisons, categorization, and use of memory (Porecman, 1992).

Don't like games and aren't familiar with computers?

Try a simple Internet search! A recent study conducted by Gary Small, MD, a professor of psychiatry at the Semel Institute for Neuroscience and Human Behaviour at UCLA showed that older adults who learn to search the Internet demonstrate a surge of activity in the decision-making and reasoning centres of the brain. Small says that they "found that for older people with minimal experience, performing Internet searches for even a relatively short period of time can change brain activity patterns and enhance function" even after only a few days. Never Give Up...Its Important to Keep Challenging Your Loved Ones even if they have Severe Memory Loss Rehabilitation with severe memory loss can be frustrating for family members. Take John, for example. John is an 85 year old man with severe memory problems. John cannot remember what he does from day to day, let alone his phone number or the names of his grandchildren. It would be unreasonable for his wife to expect that he ever will have a memory like he used to. Instead of frustrating John with a list of things for him to remember and setting unrealistic expectations, John's wife could help him remember his home address and the location of important things in the house. Rehabilitation should relate to real life situations. John's wife does a good job of keeping John's brain active. When she sends him to the car for her coat and he comes back with an umbrella, she doesn't get frustrated and annoyed, nor does she get the coat herself. She sends John back and when he still doesn't remember, she tells him to hold onto his own coat to help prompt his memory. John also may make use of memory aids such as a notepad in his pocket. A failing memory and cognitive decline can be a very frightening thing. Families can get vexed but it is important to realise that what your family member is going through is often more frustrating and scary for them.

Using Technology at Home for Cognitive Rehab

It is easy to set up your own computer based program for yourself, a family member, or client given that a computer is available. All that is required is a program or game. If you don't have one or would like a new one, take a trip to the local computer store and look for a game that works different types of cognitive processes. Perhaps you or your loved one struggle with memory or attention. There are games that target these areas. Does he/she have difficulty with perception or recognizing faces? There are games for that too. Try a Google search to find these games online. You may be more interested in other games such as combat games or sports games that require strategy and planning. Utilizing these would be a great way to work your brain. If the program is for someone who needs guidance, make sure someone is available to help them out. Ensure that you set the level of difficulty appropriately and tailor the program to fit the participant.

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