



Memory problems

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Encephalitis is a broad ranging term but, in adults at least, the most common form results from the herpes simplex virus. However, encephalitis can also be caused by other viruses such as the chickenpox virus, herpes zoster. If we look at the brain of someone who has suffered a herpes simplex infection it is almost inevitable that we will see some damage to the temporal lobes of the brain. The location of the damage explains why memory loss is the most frequent and often most disabling effect of encephalitic illness. It is well established that the temporal lobes are actively concerned with forming new memories (a process known as consolidation) and that this brain region is also responsible for storing memories. For this reason a person who has suffered from encephalitis will have problems remembering new information (e.g. the name of their doctor) and also have difficulties recalling events before their illness (e.g. family holidays).

Confronted with someone who has memory problems following encephalitis it is very important to remember that not every aspect of memory is affected. Thus although most people will have marked difficulties in remembering what has happened and what is going to happen, they will usually remember people and facts they learned some time before they became ill. Skills, such as typing and swimming are usually unaffected and language also survives fairly well - however some deficits, particularly word finding problems, may sometimes be encountered.

There are several straightforward practical steps that you can take to help someone with a memory problem. These apply particularly to life in the home.

- Use labels to indicate where things go (e.g. which cupboards are for crockery, food etc.).
 - Place signs in places where the memory impaired person might forget to take something (e.g. a sign by the door reminding him/her to remember the key). Placing things on the floor by the door e.g. keys, library books etc. helps people to remember.
 - Use a prominent wall chart to indicate the date and any events that are taking place that day. Effective use of this can reduce the amount of repetitive questioning that sometimes occurs when people have a memory impairment and also increase self reliance.
 - Encourage the person to use a diary and write notes. This will also reduce repetitive questioning and increases self reliance.
 - If the person has problems finding certain places then try to make them distinctive. The toilet, for example, can be made easier to find by painting the door a different colour to the rest. Alternatively the path to it can be marked with distinctive masking tape.
 - If there are certain items that the person habitually misplaces (e.g. glasses) put a flow chart on the wall giving instructions about which places to look for them.
 - Try to stick to a regular routine. There is plenty of evidence that memory-impaired people can pick up routines and that they can become quite unsettled if these routines are interrupted and they are not told - don't take it for granted that they "know" what's going on.

- Organise the environment so it is structured and uncluttered - keep things in the same places as much as possible. This will enhance the possibility of the person learning where things are.
- Keep a notepad by each telephone so that the person can take messages. Try to ensure that the caller's number is always recorded. A specially designed memo pad is useful here - with standard spaces for time of call, name of caller, telephone number and message.
- Using the memory function on the telephone for more commonly dialled numbers can help greatly, avoiding the need to recall a number. Telephone diallers are also becoming more common and consist of a pocket sized device which stores names and telephone numbers enabling a number to be found easily, and will activate automatic dialling if used with a multi-frequency telephone exchange.
- Display photographs of family and friends prominently and label them with their names.

The above are all things you can do without any specialised help but more is possible if you seek the professional help of a psychologist who is trained in neuropsychological rehabilitation techniques.

With the benefits of modern technology there are now a large number of electronic memory aids on the market and these offer great scope for memory-impaired people. Personal organisers hold the greatest potential because these can store lots of information and prompt the person at specific time points up to a year ahead. However, learning to operate these requires a degree of memory ability and you may well need the help of a psychologist to achieve this. While some people have successfully made use of personal organisers others have found them too difficult to use. Nonetheless there are simpler approaches that may still be effective. One approach is to use a watch that beeps every hour and train the person to consult a daily schedule (e.g. at 11 am put the oven on for lunch) whenever the watch beeps. There are watches that will display a limited amount of information at a particular time point. Casio, for example, make a watch that can be programmed to display short messages at particular times and this costs around £30. There are also "pill reminding" devices that be obtained for about £15. Post it notes can be invaluable. A pager called NeuroPage has been studied extensively in Cambridgeshire and has been shown to reduce the everyday problems of many memory impaired people. NeuroPage is now available as a service from The Oliver Zangwill Centre, Princess of Wales Hospital, Ely, Cambs, CB6 1DN.

There is a large market in electronic reminding devices and you should be able to get something useful at a reasonable cost. However, make sure you get advice first.

In the last 20 or so years there has been great interest in developing various means of helping people cope with memory difficulties. One idea was that a damaged memory was rather like a damaged muscle which, with appropriate exercise, could be made strong again. To test this out psychologists got memory-impaired people to practice using their memory by carrying out drills (e.g. trying to remember lots of lists of words). This rather boring therapy was made somewhat more enjoyable by the use of computers but the results were disappointing - a damaged memory does not recover with practice. Memory loss arises because brain cells have been irreparably damaged and there is no way of restoring their function.

A different approach is to try and teach the person strategies for using their remaining memory abilities more effectively. There are strategies to help people remember some information more efficiently and psychologists have shown that memory-impaired people can be taught to use some of these effectively. Thus it has been shown that people can improve their memory for text by using particular study techniques and that a range of other memory aids can also be effective. Because it is difficult for people with memory problems to remember to use these strategies spontaneously, it is often family members or therapists who devise and work through these strategies or mnemonics. Their value lies in the fact that people learn things more quickly when using these strategies than when simply repeating things without a strategy.

We can also provide memory-impaired people with a rule book for them to consult when attempting to remember something. One 2009 Dutch study gave people the following rules to help them with remembering:

1. Use external aids wherever possible
2. Pay more attention.
3. Spend more time.
4. Repeat information you wish to remember.
5. Make associations to the things you are trying to remember.
6. Organise what you are trying to remember.

Four months after training it was found that those people given the rules did better than those subjected to memory drills.

A number of psychologists now run memory “clinics”. This is a rather misleading term because it tends to imply that attendance will somehow make memory better. In fact these clinics usually operate by assigning the memory-impaired patient to a “memory group”. In these groups people often try out new strategies for remembering things and generally discuss their problems. While there is always a tendency for these group discussions to spill over into other aspects of individual’s difficulties, there is evidence that people attending them become less depressed even though there is no improvement in their memory ability.

The outstanding benefit obtained in the groups that we have been involved in has been twofold - first it provides an environment where people can discuss problems with others who understand from first hand experience the specific difficulties encountered by others. In many cases this has led to relief when participants discover that their problems are shared by the majority of people - when previously they had thought themselves to be alone and abnormal (particularly with problems of anger and frustration). Secondly this led to “self help” discussions, with participants passing on tips for coping with problems, which were typically better received coming from other “sufferers” than from carers or other experts. These aspects which arose unexpectedly from the group are of a social nature, and could be facilitated on a more casual level in small self help groups with a sympathetic uninvolved facilitator.

While strategies may be of some help many psychologists believe that memory rehabilitation can only be effective if it targets specific needs. One area, in particular, is that of learning to use a computer. Rehabilitation and day-care centres frequently contain computers but their use will be limited if the clients are unable to learn how to use them more flexibly. Recently a number of studies have shown that even severely impaired people can be taught how to use computers and, in some instances, this training has enabled the person to resume employment. At first it might seem paradoxical that someone who is unable to remember anyone’s name should nevertheless learn to operate a computer. The explanation is that learning how to use a computer partly relies on a form of memory that is usually unaffected by brain damage. Thus although learning is slower, and less comprehensive than that obtained by normal people, it can proceed to a point where the person has acquired enough knowledge to work independently. However, training the average memory-impaired person to use a computer is not easy and will usually require some assistance from a psychologist specialising in rehabilitation.

Up until recently it was usual practice to encourage a memory-impaired person to guess if they did not know the answer to question. Recent research does, however, question this approach because what happens is that the person tends to keep remembering their incorrect guess rather than the correct answer. This has given rise to a new form of training which is called “errorless learning”. In this training the person is exposed to the answer a number of times before being asked to remember it thus greatly reducing the possibility of an error being generated. Studies in Cambridge and Sussex have shown the method to be effective for teaching people to remember names, directions, and how to operate a personal organiser. This approach has great promise but it is still in its infancy. Nonetheless, the basic message is clear: if you are trying to teach a memory-impaired person something avoid them making errors at all costs. We can only benefit from our mistakes if we can remember the mistakes.

Whether you are memory-impaired or a carer we hope this article has given you some encouragement about coping with memory difficulties. Much of what we have said involves things you can do for yourself. However, we are acutely aware that some things (e.g. computer training) require considerable professional help which may not be available in your area. Nonetheless, we hope that simply knowing it is available will encourage you to pursue it.

Useful literature

Clare L and Wilson B.A. Coping with Memory Problems: A Practical Guide for People with Memory Impairments and their Relatives and Friends (1997) Thames Valley Test Company
A useful book especially written for families.

Kapur, N. Managing Your Memory. A Self-Help Manual for Improving Everyday Memory Skills.

Wilson, B.A. Memory Problems after Head Injury. Booklet published by Headway.

Both the above are very useful leaflets aimed at both sufferers and carers.

Baddeley, A.D. Your Memory: A User's Guide. 2nd Ed. London: Lifecycle publications. 1993

This is a good introduction for the intelligent lay person

Parkin, A.J. Memory and Amnesia: An Introduction.. Oxford: Blackwells. 2nd Ed.

This is aimed more at non-psychology professionals who seek a broader understanding of memory and its dysfunction.

Wilson, B.A & Moffat, N. Clinical Management of Memory Problems. London: Chapman & Hall. 1992.

Aimed at professionals. Contains a great deal of information about all aspects of memory rehabilitation.

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