



# Multiple sclerosis information

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## for health and social care professionals

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## Cognition

Because MS is often thought of as primarily a physical disease, problems with attention and memory are often overlooked. On formal laboratory tests, about half of all people with MS experience some inefficiency in concentration, or other mental tasks (known as cognitive difficulties)<sup>1-3</sup>.

Cognitive difficulties in MS can affect<sup>4</sup>:

- relationships and families
- competence in legal and financial matters
- adjustment to disability
- ability to benefit from rehabilitation
- employment
- driving
- quality of life.

Cognitive problems can arise early in the course of the disease although the greater the disease duration and severity the more likely significant problems are to occur. As with physical symptoms, MS may affect some cognitive functions whereas others may be left intact. This is important because it gives the person assets with which to compensate for (and sometimes mask) deficiencies. Cognitive symptoms can worsen during relapse and improve during remission but more commonly symptoms develop slowly and gradually over time.

Although cognitive dysfunction is a sensitive area to broach with people with MS and their families, it is now generally accepted that openly recognising the problem is considerably more helpful than pretending it does not exist, or misunderstanding why problems are occurring. Recognition opens the door to support, acceptance, constructive discussion and possible compensatory strategies<sup>5,6</sup>.

### Forms of cognitive dysfunction

**Memory loss** is probably the commonest problem. Apart from the obvious difficulties presented by everyday forgetfulness, memory loss also has implications in terms of learning new skills.

**Reasoning and judgment**, including new learning, problem solving and behavioural regulation may be impaired but, because of the subtle nature of reasoning, this problem is often much less obvious.

**Speed of information processing** is the most vulnerable cognitive domain. This is particularly noticeable when people have to deal with information coming from different directions ("multi-tasking").

**Attention and concentration** lapses can also cause problems, especially when there are distractions in the environment, such as a busy office.

**Visuo-spatial perception** is also sometimes impaired, although less often.

Cognitive functions which are less likely to be affected by MS include: language, remote knowledge, 'old knowing', previously learned motor skills (eg riding a bicycle), long-term automatic social skills.

### Therapy

Two studies have suggested that disease modifying drugs may offer some protection from cognitive decline in MS<sup>7,8</sup>.

Neuropsychologists, speech therapists and occupational therapists are able to assist people in understanding, assessing and managing cognitive problems in MS. The objectives of cognitive rehabilitation are to support the person with MS in maintaining:

- independence
- reliability as a family and community member
- capacity to contribute to society.

### Coping strategies

Generally, two complementary approaches may be employed:

- a retraining approach whereby progressively more challenging exercises are given by health professionals and used to strengthen impaired function
- a compensatory approach, which might involve, for example, memory prompts or the recording of information.

There are many practical compensatory strategies which can be employed and a number of publications which people with MS and their families may find useful <sup>9,10</sup>.

- use of large page-to-a-day diary and establish systematic habits of consulting it<sup>11</sup>
- use technology eg dictaphones, beepers, mobile phones<sup>11</sup>
- establish a fixed routine, eg always keeping things in the same place
- do only one thing at a time and remove distractions (background noise, TV, etc)
- use white boards, post-it notes or notebooks, especially by the phone
- avoid doing jobs which need concentration when fatigued or anxious.

It is worth remembering that some medications including those used to counteract pain, fatigue and depression may have a negative impact on cognition.

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### MS Trust resources

Cognition factsheet



StayingSmart

[www.stayingsmart.org.uk](http://www.stayingsmart.org.uk)

We hope you find the information in this book helpful. If you would like to speak with someone about any aspect of MS, contact the MS Trust information team and they will help find answers to your questions.

This book has been provided free by the Multiple Sclerosis Trust, a small UK charity which works to improve the lives of people affected by MS. We rely on donations, fundraising and gifts in wills to be able to fund our services and are extremely grateful for every donation received, no matter what size.

## MS Trust information service

### Helping you find the information you need

The MS Trust offers a wide range of publications, including a newsletter for health and social care professionals Way Ahead and the MS Information Update, which provides an ongoing update on research and developments in MS management.

For a full list of MS Trust publications, to sign up for Way Ahead and much more visit our website at [www.mstrust.org.uk](http://www.mstrust.org.uk)



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