

Memory and Thinking

Practical living for everyday life with MS

05

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Not everyone who has multiple sclerosis (MS) will experience problems with memory and thinking but mild difficulties are common. For example, many people with MS can find it harder to recall information, follow conversations or think things through. These are examples of cognitive skills - and there are many ways to cope with difficulties, some of which we will look at in this booklet.

What is cognition?

Cognition refers to memory and thinking. It describes the way we:

- focus, maintain and divide attention;
- learn and remember new things;
- think, reason and solve problems;
- plan, carry out and monitor our own activities;
- understand and use language;
- recognise objects, assemble things together and judge distances.

These skills vary naturally in different people - we all have different strengths and weaknesses. Our cognitive powers are considered to be normal if our skills allow us to cope adequately with everyday life.

How might MS affect memory and thinking?

MS causes changes in parts of the brain and spinal cord and these can sometimes affect a person's memory and thinking. Thought processes rely on messages being passed along nerves to different areas of the brain and the lesions can stop or slow down these impulses. It has been found that cognitive problems are more common in individuals who have many lesions.¹

But although brain lesions can result in more permanent cognitive problems, a number of factors can interfere with or impair cognition temporarily. Other things that can affect concentration, memory and thinking include high alcohol consumption, poor nutrition and illnesses as well as medication that affects the central nervous system like tranquilisers, sleeping pills and painkillers.

What kinds of things can affect memory and thinking?

- Tiredness and fatigue
- Relapses
- Physical restrictions
- Depression, anxiety, stress
- Permanent brain lesions

Problems with cognition can be both temporary and permanent.

Many people find that cognitive problems, like physical symptoms, seem to be worse when they are tired. When you are very tired it becomes difficult to concentrate or take in new information. However, when the fatigue is over, cognitive functions return to normal. Depression, anxiety and distress can cause similar problems - if you feel low or depressed, you may find your memory and concentration are not as good as usual. As mood improves, these difficulties should also improve. Further information on pain, managing a relapse, fatigue, mood, depression and emotions as well as other titles can be found in the MS Living series.

‘If you are giving more concentration to physical tasks than usual, then it can be hard sometimes to maintain concentration elsewhere.’

A number of people with MS also have to devote a good deal of thinking to how they will carry out physical activities. Most people don't have to think about how they walk or do other physical things - the body is usually on automatic pilot and the mind is free to think about other things. If you are giving more concentration to physical tasks than usual, then it can be hard sometimes to maintain concentration elsewhere.

A lifestyle change can also affect cognition. MS can cause people to stop participating in activities that kept them lively and stimulated. People may give up work or stop doing things around the house. They may become more laid back about dates and times.

Am I the only one?

How typical are cognitive problems in people with MS?

Not everyone with MS will experience cognitive difficulties. However, as many as 65% of people with MS do have some form of cognitive changes. For the majority of these people, the changes are mild to moderate rather than severe.²

Cognitive changes can be worrying and even mild changes might need specific coping strategies. If cognitive symptoms are not recognised, people can often feel very frightened about what is happening to them. Having good accurate information for you and those around you about the problems is usually the best form of defence.

What can the impact be when there are problems with memory and thinking?

- It can be frightening to feel that you do not have a grip on things that used to come more easily.
- Sometimes people worry that they are 'losing it' or going mad, or that they are becoming stupid.
- It can cause problems in relationships, with family life.
- There can be an impact on employment.

What problems might there be?

Like other symptoms of MS, cognitive symptoms vary greatly from person to person. If you do have some cognitive symptoms, it does not mean that you will experience all of these. Problems with language, visual perception (recognising what you see) and spatial relations (judging distances and position) are not so frequent for people with MS. The most common difficulties are with:

Learning and memory

There are different types of memory, and the brain organises these in different ways. MS most commonly affects remembering recent events and remembering to do things. Some people with MS also say that it may take more time and effort to actively search for a memory. This is known as recall and it can often be affected. Fortunately there are lots of ways that you can compensate for these kinds of problems (see page 13).

In contrast, recognition is rarely affected in MS. Recognition is the power to instantly remember something when you see or hear it - remembering both what it is and the memories attached to it, without actually trying to remember.

People with MS rarely have problems with other types of memory and can remember skills (like cycling a bike - things that are 'second nature'), general knowledge or things about the past. Memory difficulties experienced by people with MS are not like the types of problems experienced by people who suffer from Alzheimer's disease. Most often, people with memory problems due to MS continue to know who they are, have no major difficulties with communication and are able to carry out normal daily activities.

Attention, concentration and mental speed

Some people find it more difficult to concentrate for long periods of time or have trouble keeping track of what they are doing if they are interrupted ('they lose the thread'). It may also be more difficult to do several jobs at once or carry on a conversation while the TV or radio are on.

Many people describe feeling as though they can't function as quickly as usual. They can still achieve tasks but it requires more time and effort than before. Research also suggests that the ability to process information may slow down.³

Problem solving - planning, performing and evaluating tasks

Some people experience difficulties when making plans and solving problems. They know what they want to do but find it difficult to know where to begin, or find it difficult to work out the steps involved to achieve their goals. Problems with planning, structuring and taking an overview can make for confusion and stress, which in turn can hamper learning and memory.

Word finding

People with MS may also experience difficulties finding the right word. ('It's on the tip of my tongue' - you know the word but just can't think of it.) It may be difficult to take part in a discussion because it takes too long to express an opinion or find the correct word, and the discussion has already moved on.

Employment and education

Even early on in MS, problems with cognition can have an impact at home and at work. In fact, research has shown that cognitive symptoms and fatigue are two primary reasons why people might stop working. Employees and employers have certain rights and responsibilities under employment law. The Disability Act 2005 and the Equal Status Act 2000, 2004 and 2008 set out the responsibilities on employers to make certain provisions for their employees, as well 'reasonable accommodation'.

At work or study, you might find that certain strategies help. For example, using a tape recorder or carefully scheduling work or classes to minimise the impact of fatigue and lapses in concentration could help. More substantial job restructuring could be carried out in collaboration with your employers.

The good news is employers can avail of several FÁS schemes and grants if they employ someone with a disability.

- Employee Retention Grant Scheme, which helps employers retain employees who acquire an illness that impacts on their ability to carry out the job. The scheme identifies accommodation and/or training to enable the worker to stay in their current position or will re-train the employee so that they can take up another position within the firm. Employers will be provided with assistance to buy in external specialist skills and knowledge needed for the retention of the employee.
- Wage Subsidy Scheme provides financial incentives to private employers to employ a person with a disability for more than 20 hours per week. Three strands exist providing various subsidies for the number of people with disabilities employed.

- While not directly associated with memory and thinking, the workplace equipment adaptation grant provides funding towards the cost of adaptations to premises or equipment. These can include minor building modifications such as ramps or modified toilets; alarm systems with flashing lights, and equipment adaptation such as voice synthesisers for computers. A personal reader grant, meanwhile, is provided for those who are blind or visually impaired and need assistance with job-related reading.

To apply for any of these grants or subsidies or to learn more about criteria or eligibility, contact your local FÁS office or log onto www.ms-society.ie.

There are allowances and grants available from the Government for students with disabilities, also. The fund for students with disabilities supports full-time students with disabilities, with eligible students receiving assistance from PLC level right up to doctoral level. A student's college will make the claim for the funding on behalf of the student following an assessment of need. Applications cannot be made directly to the fund by students. The support is not means-tested, but a minimum age of 17 does apply and those enrolled in part-time courses are not eligible.

Financial support can be provided for such things as assistive technology equipment and software, personal and academic support and transport. Technology such as dictaphones, mini discs, microphones and tape recorders can help you with memory and thinking.

Information on how to apply can be found at www.education.ie and www.studentfinance.ie

The Disability Act 2005 now obliges colleges and universities - all public bodies - to make alterations to buildings to improve access. They must also make similar adjustments to ensure that you are not discriminated against, for example, by providing longer time to complete assignments and areas free from distractions to study. Most universities and colleges now have a dedicated Access office to help with any issues you may have.

Can cognitive problems be predicted?

Studies into cognitive problems in MS have shown conflicting results. It is not entirely clear whether there is a link between cognitive problems and other symptoms of MS, how long you have had MS, how severe your MS is, or what type of MS you may have.² Cognitive problems are therefore difficult to predict - and may occur even in individuals who are newly diagnosed as well as those who have had MS for some time. Some people are mildly affected physically but have significant cognitive dysfunction. It can be helpful to be aware of even mild symptoms, and to try to find ways to cope with and compensate for them. On the other hand, the knowledge that MS can cause problems with memory and thinking, as well as the associated fear, may result in being too aware of minor memory lapses. Everyone forgets things from time to time; it's only a problem when the forgetfulness becomes more frequent than usual and has an impact on what you would like to do.

Can problems get worse?

Cognitive problems are not inevitably progressive. They are not destined to worsen steadily once they start. Like motor or sensory problems, cognitive difficulties may become worse, or stay about the same. For some people, they might improve. As all MS experts agree, variability is the hallmark of this disease.⁴

If people experience some cognitive difficulties, it is possible that they become worse, although the rate of progression is usually fairly slow.⁵ This means that people can develop strategies to help them manage their symptoms. Some people may eventually develop severe cognitive problems, but most people do not.

Physical symptoms such as dysarthria (poorly articulated speech), ataxia (failure of muscular coordination) or nystagmus (rapid involuntary movement

of the eye) are sometimes mistaken as visible signs of cognitive symptoms. No connection has been shown between these symptoms and cognitive performance.

What should I do if I suspect cognitive problems?

The first signs of cognitive dysfunction may be subtle. The person may have difficulty in finding the right words to say, or trouble remembering what to do on the job or during daily routines at home. Even mild cognitive disturbances can cause uncertainty and fear. It is worth remembering that these are symptoms of MS and that there are ways of managing them. Often, the family becomes aware of the problem first, noticing changes in behaviour or personal habits.

If, as someone with MS, you have repeated difficulties with your memory (for example forgetting names and places, losing objects, struggling to remember familiar words), a first step may be to discuss this with your doctor. It may be a symptom of MS or it may be due to other causes.

If, as a relative, you notice signs of cognitive problems, you should try to talk openly about them. It can often be a relief for the person with MS when someone else brings up the subject. It can help with identification of their difficulties and make it possible to talk about them as well.

As cognitive problems may sometimes progress, it can help if they are evaluated so you can find strategies to help you to deal with any changes. Using compensatory strategies should enable you to continue to manage as effectively as possible.

Self-help or professional help?

Many people can identify for themselves the individual areas that are causing problems and work out ways to deal with them. Ask yourself if there are things that go wrong time and again. Find out if your problem is attention, recall, organisation or planning. You may be able to apply some of the tactics in this booklet to help. You might also want to ask for professional help to identify the areas where you could use some assistance. If you decide to opt for professional help, the first port of call may be a neuro-psychological assessment (see the next section).

What happens in a neuro-psychological assessment?

This assessment, which can be arranged by your neurologists or MS nurse, may help you untangle the areas that are causing problems and make treating them easier. An assessment can try to evaluate your current level of cognitive functioning. It includes:

- an interview - about the purpose of the assessment and about your past and present 'psychosocial functioning' (your education, occupation, interests, illnesses, medication and your MS symptoms, both cognitive and physical);
- a number of different verbal and written tests on areas such as attention, memory, problem solving;
- information and feedback about the test results.

A neuro-psychological assessment is a measurement of your ability to perform mental functions, such as remembering things and concentrating on things. Like an MRI or CT scan of the brain, it involves building up a picture of the brain. But whereas a scan is a picture of what the brain looks like,

a neuro-psychological assessment brings together information to illustrate what the brain can do.

The assessment usually takes about two to three hours, with a follow up session for feedback. For each task the instructions are explained and then you try to complete the task. For example, the task may be to remember a list of words that are read out. An assessment will try to identify both the specific problems you are experiencing and also your personal strength to help you overcome and manage weaknesses. The results should clarify what is happening and help you to compensate and deal with the changes.

A neuro-psychologist will not usually test someone during a time of depression, excessive stress or period of relapse. If a person is experiencing these things, it is better to try to address them first, perhaps with a doctor or a counsellor, before carrying out a neuro-psychological assessment. After the assessment, you may be able to get professional help in the area of specialist rehabilitation.

There are only a few public neuro-psychologists in Ireland so waiting lists maybe long for an appointment. Contact your neurologist or MS Nurse for a referral.

What is neuro-psychological rehabilitation?

This kind of rehabilitation aims to minimise the effects of problems with memory and thinking. It can include:

- practising and improving the weakened skills;
- making better use of your strengths;
- teaching alternative ways or compensatory strategies to perform tasks;
- ways to cope with the limited abilities (both practically and emotionally);
- counselling relatives.

Goals would then be set according to the individual and based on the outcome of the assessment. A goal might be to restore or improve your ability to work, to encourage and support future education, or to improve your general performance on tasks.

Rehabilitation may be carried out in an individual or group setting. In small groups, people can express thoughts and feelings about the problems and explore ideas about how to cope. Often a partner or family member

will also be invited to attend sessions - people close to you may also have concerns about your difficulties and the effects on family life. They may be able to help you put in practice new strategies and techniques.

If problems appear to be progressive, practising weakening skills may seem a waste of time. However, recognising and understanding what is going on and reorganising the way you do things may still make it easier to cope. It is often useful to learn to make the most of the skills that you are good at and to practise using different types of aids to help you. For example, if you have memory difficulties, knowing your particular strengths and weaknesses will be very helpful. In addition, learning to use a memory aid like a diary may help you stop worrying that you might have forgotten something. Also, writing things down can help to fix them in your mind.

Drug treatment

Not much has been written on the effects of the disease-modifying drugs beta interferon and glatiramer acetate on cognitive dysfunction. The possibility that they may reduce disease progression, and thereby slow cognitive decline, may support the move toward early treatment with these agents, but more research is needed to confirm the benefits of doing this.

There are no drugs licensed specifically for cognition problems in MS, but sometimes, drugs that have been licensed for Alzheimer's may be prescribed. There have been few clinical trials to assess how effective they are in MS. One trial in 2008, into the Alzheimer's drug rivastigmine, did not show clear benefits in MS.

Hints for dealing with cognitive problems

If you experience cognitive difficulties, strategies and tools to compensate are not just useful - they may be essential to the maintenance of your lifestyle, relationships and self-esteem.

Some tips that may help:

- Relax, have a sense of humour and believe in yourself!
- If you have any concerns about cognitive changes, talk to your doctor or someone who you trust. Make sure you understand what they are explaining.
- Try to tell people about your difficulties. This can help reduce the number of misunderstandings. Otherwise, difficulties might be interpreted as boredom or lack of interest on your part. Maybe showing people this publication will help you to explain your symptoms.
- Frank acknowledgment of problems can prevent misunderstandings (it doesn't help to pretend you can follow the conversation if you are having trouble).
- Try to be aware of your own strengths and weaknesses, so that you can set appropriate goals.
- If you have trouble with verbal expression and communication, it might help before speaking to impose a delay into the conversation so you can quietly organise your thoughts before expressing them.
- Carrying out different and new activities helps you to practise your cognitive skills and use all your different resources.
- Don't tire yourself out. Over time, you will probably learn to recognise fatigue coming on and try to arrange appropriate rest breaks. Use your best times to do the most challenging work.
- Concentrate on one thing at a time. Do not divide your attention among several tasks. Turn off the TV or radio if trying to concentrate on something else.
- Develop your own self-help techniques and practise them with the help of a friend. An example is using the four Rs in reading techniques - Read, Re-read, Reorganise (who, what, when, where, and how), and Review. Use as many senses as possible to reinforce what you read - seeing, saying, hearing, and writing.
- Heat management - many people say that their thinking is worse when overheated. There are many things you can do to stay cool.
- Have regular cold drinks or suck an ice cube or frozen fruit.
- Spray your face and wrists with a spray bottle.
- Some people find eating makes them warmer, and so might find it helpful to sip iced water while eating.
- When you take a bath or shower, start with tepid water and reduce the heat gradually.

- A floor or desk fan can help to keep the temperature down and the air flowing in a room.
- Cooling scarves, ties and wrist bands contain a gel or other substance that can be pre-cooled in the fridge or freezer before wearing.
- Cool vests incorporate cooling packs (like a picnic bag) fitted into the lining of a waistcoat-like garment, keeping the torso cool.

Overcoming difficulties with memory

Use 'memory aids' to remind yourself of things. Here are some suggestions:

- Keep a PDA (personal digital assistant) for addresses, phone numbers, bills, diary, shopping lists, to-do lists, driving directions and so on. Some mobile phones can offer these kinds of functions too. They can also be set to beep to remind you to do certain things at set times. A less high tech method might be to set an alarm clock to remind you to do something.
- Computers have organiser programs that can store huge amounts of information. You might synchronise your computer at home with an electronic organiser or PDA which can be carried around.
- Use a wristwatch with a beeper, and set it to remind you of events. People who need to take medication at certain intervals find this especially useful.
- If it's not too fiddly, use your mobile phone calendar and 'to do list' function. You can remind yourself of what you're doing on the go.
- Use GPS devices or 'sat navs' (satellite navigation) for driving. You input the postcode of your intended destination and the technology plots your course.
- Use a tape recorder or dictaphone to store reminders, rather than writing them down.
- Make up mnemonics (pronounced Ne-MON-ics). Mnemonics are rhymes, rules or phrases to help you remember things. For example 'Richard of York gave battle in vain', the first letters being the order of the colours of the rainbow. You could make up your own that are relevant to you. Other examples are I before E except after C, or 30 days hath September, April,

June and November. Sometimes they work despite being (or possibly because of being) illogical or arbitrary.

- Use visual imagery - make up pictures to tell a story, visualise the information you wish to recall. For example, don't just learn the directions to the library, picture the route.
- Keep a daily diary or notebook. Write down all appointments, reminders, and lists of things to do in one place. When you make or receive a phone call, note the date, time, who you spoke with, and a short reminder about what was said. To help with this, keep a message book by the telephone.
- Get in the habit of referring to this diary routinely, perhaps at the same time each morning and again in the evening for tomorrow's schedule.⁴
- Post a large family calendar in a prominent place - maybe the refrigerator door - where everyone in the household writes down their activities and schedules. Think of this calendar as 'communications central' and refer to it daily. Check things off as they are completed.⁴ Post-it Notes are useful, but they can get unstuck. Some phone companies are now starting to offer electronic versions of the 'fridge door' to help families organise.
- Design a master grocery list, with all the items you normally need, and make multiple copies. Before going out to shop, review the list and check off the items you've run out of. This is often easier than writing a list each time from scratch. Also, if you do your shopping online, many companies allow you to save 'favourites' for each time you return.
- Try to stay calm when memory fails. It's normal to tense up or feel frustrated if you are forgetting or losing something, but when you do, you switch out of problem-solving mode and into angst mode, so take a few moments to calm down. Do slow, deep breathing or other relaxation exercises. Your memory will usually clear.⁴
- Keep important things in a designated place. Keep your daily diary on your bedside table or next to the phone, your keys in a particular drawer. Consistency and routine make it easier to remember where things are. Encourage family members to make sure things are put back in their correct place.
- Try to establish routines to do things so you will have less to remember.

Difficulties with attention and concentration

If you find that you lose track of what you're doing if you are interrupted, there are practical ways of helping yourself with this problem:

- Try to reduce the number of distractions when you are talking to someone or working on a particular task.
- Turn the TV or radio off, and do one thing at a time.
- Try to work in a private room, so there are fewer distractions.
- Put the telephone on to voicemail or use the answer-phone while you're dealing with a task, so you are not constantly interrupted.
- If you find it difficult to concentrate for longer periods:
 - Try to take the effects of tiredness and fatigue into account. Plan activities so that you do your most demanding work at your best times.
 - Try not to place big demands on your concentration when you are feeling tired.
 - Pace yourself.
 - Schedule rest periods.

Difficulties with mental speed

- Give yourself longer to take in and retrieve new information.
- Tell people that you may be slower, but that you will get there in the end.
- Try to plan ahead as much as possible - to avoid situations where you will have to respond very quickly.

Difficulties with problem solving (planning, performing and evaluating tasks)

Try to be systematic:

- If you plan your daily activities systematically, this might improve both your ability to get an overview and your ability to concentrate and remember.
- Use a calendar for planning the day and week - perhaps together with your partner or family.
- Tell those around you that you feel better if things are planned in advance, for example visiting friends or going out.
- Don't be afraid to ask for help.
- Make checklists to help you work your way through complex tasks.

Difficulties with word finding

- Tell those close to you about your word finding problems. Tell them how you would like them to react - to help or not to help.
- Try to be active during conversations.
- There are plenty of exercises and games that can help. A speech and language therapist may be able to help with suggestions.

The effects on other people

When someone with MS has cognitive difficulties, their family and friends may be affected too. Everyone involved might go through a range of reactions. They may get angry and frustrated as well as worried and afraid. These reactions might come partly from misunderstandings about cognitive symptoms, so discussing things openly can help people to accept changes and work out how to manage them together. Some people find counselling or psychotherapy for the whole family can address any behavioural changes and emotional responses, and help to develop realistic expectations. Family members need to recognise that these problems are not under the person's control. You wouldn't blame a person for having problems walking because of MS, so don't blame him or her for forgetfulness. A person who's experiencing memory loss often feels guilty about it. Cognitive symptoms may create stress and pressure at work and at home. Some understanding of cognitive changes will usually make it a little easier to deal with the problems if they arise.

Below are some common issues and suggestions for tackling them. Other people with MS might also have their own suggestions of things that work for them.

- Someone who knows you well may 'fill in' for you when you forget something or don't answer a question right away. You may be comfortable with this, or maybe you're not. It is important to tell other people how you would like them to react.
- Other people may get frustrated when you don't answer a question as quickly as you did before, or if you give a confusing answer. If you are having problems during discussions, it is a good idea to tell family members and friends about these rather than trying to cover them up.

- Other people may think you are awkward when you just can't think straight or can't remember something - particularly if there are times when you don't experience problems like this. You might need to explain to people about MS symptoms coming and going - and to remind them that MS can cause 'invisible' cognitive symptoms as well as more obvious difficulties.
- Other people may think you don't care about them if you forget to ask about something important. If you are angry about what is happening to you, you may take your anger out on others without realising you're doing it.
- It is a good idea to talk about your feelings to those who are close to you.
- As well as talking to them, you might want to share this booklet.
- Other people may become angry, depressed or anxious about your cognitive problems and be afraid of losing you. This may make them irritable or withdrawn. The person you are closest to may feel muddled and confused themselves, as if they have 'caught' some of your difficulties with thinking clearly.
- They may feel better and be able to think more clearly if they have someone to talk things over with.

An MS nurse, counsellor, psychologist or other professional might be helpful in this.

Further information

MS Ireland publications

MS Ireland has a number of publications relating to many aspects of living with MS. To view and download all our publications for free, log onto our website www.ms-society.ie.

MS Ireland website and magazine

Keep up to date with news relating to MS by logging onto our website www.ms-society.ie and signing up to receive regular email updates. Members also receive our magazine, MSNews.

MS Information Line, 1850 233 233

The MS Information Line is an information and listening service for anyone needing immediate information or support on any aspect of MS. It is a confidential service

Regional Services

10 Regional offices around the country provide individuals and their families a home visit service where our trained staff can answer queries, offer advice and provide referrals, if necessary. Regional offices also provide a programme of activities for groups of people; newly diagnosed days, carers support groups, personal development sessions and a range of physiotherapy and exercise interventions.

Local Branch Network

MS Ireland has 41 voluntary Branches that provide information and support to the local MS community. Run by people affected by MS, the Branches offer many social opportunities to people with MS and their families to come together and share experiences.

MS Care Centre

The centre provides short-term respite care, therapy services, neurological assessments and social activities for residents. While staying at the Centre residents can speak to our many trained professionals including the MS nurse and the Physiotherapist.

Your neurologist, MS nurse, GP, physiotherapy and other health-care professionals are also a key source of information.

Useful Organisations

Assist Ireland

Ground Floor
Georges Quay House
43 Townsend Street
Dublin 2
Tel: 1890 277 478
www.assistireland.ie

The Psychological Society of Ireland

CX House
2A Corn Exchange Place
Poolbeg Street, Dublin 2
Tel: 01 474 9160
www.psihq.ie

Mental Health Ireland

Mensana House
6 Adelaide St
Dun Laoghaire
Co. Dublin
Tel: 01 284 1166
www.mentalhealthireland.ie

Association of Occupational Therapists of Ireland

Ground Floor Office
Bowbridge House
Montgomery Lane, Dublin 8
Tel: 01 633 7222
www.aoti.ie

Fás

FÁS Head Office
27-33 Upper Baggot Street
Dublin 4
Tel: 01 607 0500
www.fas.ie

Further reading

Use your head. Innovative learning and thinking techniques to fulfil your mental potential,

by Tony Buzan. Published by BBC Active. (2006)

Multiple Sclerosis: The Questions You Have; The Answers You Need (4th ed.)

by Rosalind Kalb PhD (ed.) Published by Demos Medical Publishing. (2008)

Multiple Sclerosis: A Guide for Families (3rd ed.)

by Rosalind Kalb PhD (ed.) Published by Demos Medical Publishing. (2006)

Managing the Symptoms of Multiple Sclerosis (5th ed.)

by R Schapiro. Published by Demos Medical Publishing. (2007)

Understanding the Cognitive Challenges of Multiple Sclerosis

by Nicholas LaRocca, PhD, and Rosalind Kalb, PhD. Published by Demos Medical Publishing. (2006)

Memory Tips for Making Life Easier

by Shelley Peterman Schwarz. Published by Attainment Company, Inc. (2006)

www.meetinglifeschallenges.com

This website hosts internet radio interviews with for example, Jeffrey Gingold, author of Facing the Cognitive Challenges of MS and Carol O’Leary, author of Living with multiple sclerosis.

A self-help guide for managing everyday memory problems

by Dr Simon B. N. Thompson. Published by Oxford Press. (2000)

Mental Sharpening Stones: Manage the Cognitive Challenges of Multiple Sclerosis.(1st ed.)

by Jeffrey N. Gingold. Published by Demos Medical Publishing. (2008)

Staying Smart

Staying Smart is an online project from The MS Trust and Royal Holloway, University of London. Learn more about cognitive difficulties in MS. Build confidence in managing them. www.stayingsmart.org.uk

References

- 1 Ron, M. A. et al. (1991) Cognitive abnormalities in multiple sclerosis: a psychometric and MRI study. *Psychological Medicine*, 21, 59-68.
- 2 Patti, F. (2009) Cognitive impairment in multiple sclerosis. *Multiple Sclerosis* 15, 2-8.
- 3 Demaree, H. D. et al. (1999) Speed of information processing as a key deficit in multiple sclerosis: implications for rehabilitation. *Journal of Neurology, Neurosurgery and Psychiatry*, 67, 661-3.
- 4 Jablow, M. (2000) Inside MS, the members magazine of the US National MS Society.
- 5 Kujala, P. (1997) The progress of cognitive decline in multiple sclerosis. *Brain*, 120, 289-97.

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RIMS is a European-wide network of professionals who have expertise in MS and rehabilitation medicine.

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Suggestions for improvement in future editions are welcomed. Please send them to info@ms-society.ie

Multiple Sclerosis Ireland

Multiple sclerosis (MS) is the most common disabling neurological disorder affecting young adults, and we estimate that around 8,000 people in the Ireland have MS. MS is the result of damage to myelin - the protective sheath surrounding nerve fibres of the central nervous system. This damage interferes with messages between the brain and other parts of the body. For some people, MS is characterised by periods of relapse and remission while, for others, it has a progressive pattern. For everyone, it makes life unpredictable.

MS Ireland is the only national organisation providing information, support and advocacy services to those affected by MS, their families, employers, health professionals and others interested in MS.

- Individual and family support
- Living with MS programmes, activities and workshops
- Confidential Information Line, 1850 233 233
- Respite and therapy centre
- Advocacy and lobbying
- National Conferences
- Professional counselling
- 41 Voluntary Branches, nationwide
- MSnews magazine and e-newsletter
- Website www.ms-society.ie
- Information and research

You can help the work of MS Ireland by:

- becoming a member (open to anyone);
- making a donation or fundraising;
- offering your time as a volunteer.

Contact information

To learn more about our services or to make contact with local services, contact our national office:

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