

Facts for the media

About multiple sclerosis

Multiple sclerosis (MS) is an incurable chronic disease in which the body's own immune system destroys tissue in the brain and spinal cord.

Globally, the estimated number of people with MS has increased from 2.1 million in 2008¹ to 2.3 million in 2013.² The majority of those diagnosed with MS are young, active people in their 20s and 30s,³ and about two-thirds of those affected are women.² MS therefore affects people with the potential for many decades of employment, some of whom may be making decisions about starting and raising families.

Even in the early stages of MS, cognition, quality of life,⁴ day-to-day activities and the ability to work⁵ can be markedly affected. As the disease progresses, increasing disability – such as difficulties in walking – imposes a heavy burden on people with MS and on their families. It also leads to substantial economic losses for society, owing to diminished working capacity.⁶

MS is the most common cause of wheelchair use among those aged 18–64 years⁷ and the third most common cause of paralysis (after stroke and spinal cord injury) across all age groups⁸ in the USA.

Although there is no cure for MS, therapies exist that can alter the disease course by reducing disease activity and slowing down the accumulation of disability.

The causes of MS are unclear, but risk is partially determined by a complex interaction between genetic and environmental factors.

About brain health

The brain is a remarkably flexible organ. Research has shown that if tissue in one area is damaged, other areas can work harder to compensate.^{9,10} This extra capacity is known as 'neurological reserve', or 'brain health', and means that tissue loss caused by MS is not always immediately apparent. Indeed, many people experience cognitive problems before more obvious symptoms of MS appear – sometimes years before.¹¹

In general, brain health should be valued highly, as it is what allows people to maintain a good quality of life as they age.¹² In multiple sclerosis, however, tissue loss is ongoing¹³ and brain health is depleted even during periods of remission. This is why the report recommends a therapeutic strategy of minimizing MS disease activity in order to maximize lifelong brain health, cognitive function and physical function.

Media relations

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Background to the report

In summer 2014, Oxford Health Policy Forum (OHPF) approached Professor Gavin Giovannoni, following publication of an [article in the newsletter of the European Brain Council](#). In it, Professor Giovannoni called for regulatory changes to enable European clinicians to prescribe the most appropriate treatment for each person with multiple sclerosis in a timely manner, instead of treatment choices being restricted. Such changes have the potential to improve outcomes for people with MS by preventing unnecessary disability progression. In subsequent meetings, OHPF and Professor Giovannoni formulated ideas for a global initiative that would substantially increase the scope and reach of these calls for change.

The evidence-based report [Brain health: time matters in multiple sclerosis](#) marks the start of this global initiative to improve outcomes for people with MS. In December 2014, Professor Giovannoni invited clinicians, researchers, specialist nurses, health economists and representatives from patient groups to form an international author group. The group undertook structured discussions between January and August 2015. The report presents the evidence, consensus findings and recommendations that emerged from this process.

Professor Gavin Giovannoni is centre lead for neuroscience and trauma at the Blizard Institute, Barts and The London School of Medicine and Dentistry.

Oxford Health Policy Forum is the policy arm of **Oxford PharmaGenesis Ltd**, the publisher of the report. OHPF is committed to improving public health and health policy and works with international experts to produce evidence-based, scientifically robust recommendations that provide a strong foundation for action and policy change.

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Endorsements

The recommendations made in *Brain health: time matters in multiple sclerosis* have been [endorsed by a number of professional and advocacy groups](#).

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