

Impact of Multiple Sclerosis Symptoms (IMSS) in Serbia

Despite progress in multiple sclerosis (MS) care, healthcare systems across Europe still lack a **coordinated and prioritised approach** to managing MS symptoms effectively. MS is a lifelong neurological condition affecting more than 1.2 million people in Europe, yet many continue to face gaps in care and support.

The European Multiple Sclerosis Platform (EMSP) is spearheading research to understand how people with MS experience and manage their symptoms across the continent. By **identifying disparities** EMSP aims to promote stronger collaboration among key stakeholders to effectively address unmet needs.

The Impact of Multiple Sclerosis Symptoms (IMSS) initiative seeks to drive policy change, improve care pathways, and enhance rehabilitation outcomes, ensuring that people with MS receive the **comprehensive support** they deserve.



Miljana's story is just one example of how MS reshapes lives — and why understanding these experiences is crucial for improving care.



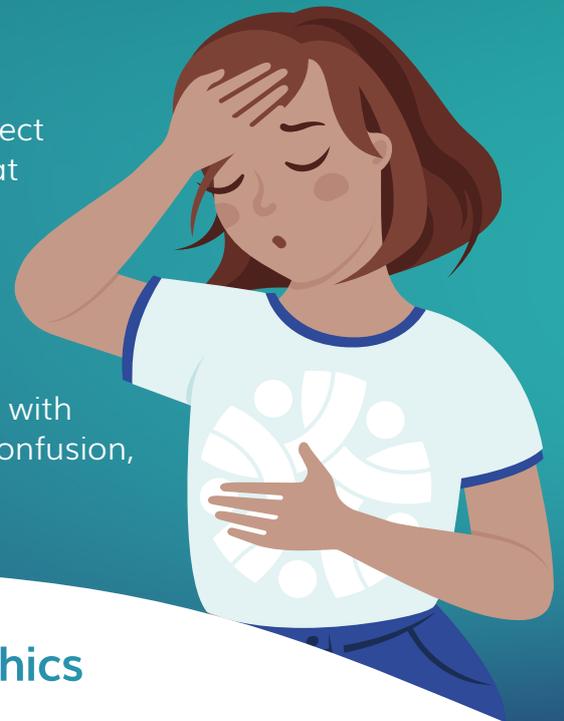
EMSP and 24 national MS societies across 22 European countries collected real-life evidence on MS symptoms and management. Behind these findings are real people, each with their own challenges, uncertainties, and hopes.



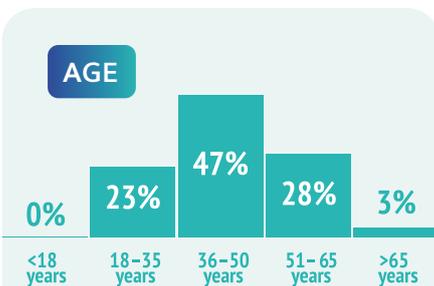
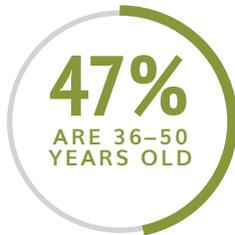
In Serbia, 458¹ people with MS participated in the IMSS survey from May 5 to August 31, 2023.

A Life Changed by MS

Miljana had always been full of energy — a mother, a project manager, and a passionate traveller in her free time. But at 31, her life took an unexpected turn. She started noticing strange sensations in her legs, followed by bouts of overwhelming fatigue. Over time, these symptoms grew harder to ignore. Tasks she once did effortlessly became a struggle. Her doctor ran tests, but the results were inconclusive. For three and a half years, Miljana lived with uncertainty, her daily life becoming a patchwork of pain, confusion, and questions without answers.



Participant demographics

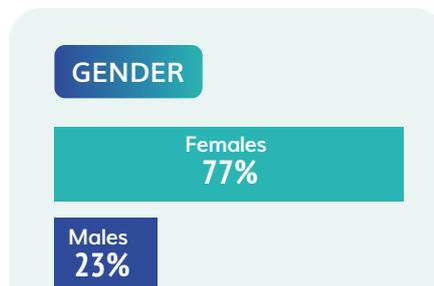


People between **18-35** reported the most anxiety.

Individuals aged **36-50** experienced the most fatigue and sexual problems.

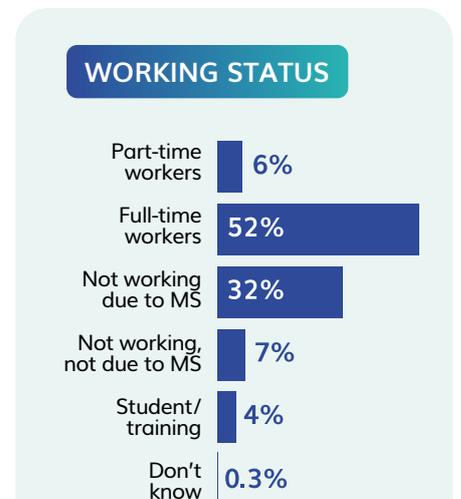
Between **51-65**, the highest balance problems, spasticity problems, bladder control problems, mobility impairment, dizziness and arm and hand problems.

Above 65, the sample size was small to draw conclusions.



Females reported significantly fewer bladder control problems, mobility problems, and sexual problems, but **more depression or mood changes, cognitive impairment, anxiety, heat or cold intolerance, dizziness and vision problems** compared to males.

Males reported significantly fewer cognitive impairment, anxiety, heat or cold intolerance, dizziness and vision problems, but **more mobility impairment and sexual problems** than females.



Full-time workers reported significantly less presence of all symptoms.

People not working due to MS reported the most presence of all symptoms.

For other groups, the sample size was small to draw conclusions.

Understanding MS Across Europe

IMSS aims at uncovering the truths behind the symptoms, struggles, and stories of MS. How do people across Europe experience the condition? How do healthcare systems respond to their needs? And most importantly, where are they falling short?

For Miljana, these questions resonate deeply. Her diagnosis eventually came at age 35, but the journey didn't end there. Her symptoms — fatigue, balance problems, muscle spasms, and sleep disturbances — continued to affect her daily life. Navigating the healthcare system felt like an uphill battle, and she often wondered if there was more that could be done.

Miljana's experience reflects a broader reality revealed through the IMSS survey. Thousands of respondents shared their stories, offering insight into the challenges of living with MS: delays in diagnosis, inconsistent care pathways, and limited support for symptom management. Despite these challenges, EMSP saw an opportunity to drive change. By amplifying these voices, EMSP could push for policies that prioritise comprehensive, equitable care for people like Miljana across the continent.

Clinical situation

DIAGNOSIS AND SYMPTOM ONSET

57% diagnosed between 18–35 yrs

10.1 YEARS average disease duration

2 in 5 have at least 1 additional illnesses

Delay from symptom onset to diagnosis



31 symptom onset age

AVERAGE DELAY OF 3.5 YEARS

34.5 average diagnosis age

TYPES OF MS

59% RRMS, Relapsing Remitting MS

10% PPMS, Primary Progressive MS

17% SPMS, Secondary Progressive MS

15% Unsure of their MS type

DISABILITY LEVELS

19% of the respondents had mild disability while 36% had moderate disability and 18% had severe disability. People living with PPMS reported more moderate (45%) and severe disability (36%) compared to RRMS. People with SPMS reported the most severe disability (54%)².

QUALITY OF LIFE

The majority of respondents had no or slight problems, while 10% were experiencing moderate or severe problems affecting their quality of life. The quality of life deteriorated more among people with PPMS (17%) and people with SPMS (27%)³.

USE OF DMDs

74% of respondents have used **Disease Modifying Drugs** (DMDs), with 64% currently using them. 25% reported less than a 1-year delay to start DMDs, while 26% experienced delays of 6 years or more. Among non-users, the main reasons were:

- 14% concerns about use
- 63% never being offered
- 14% cannot afford their costs.

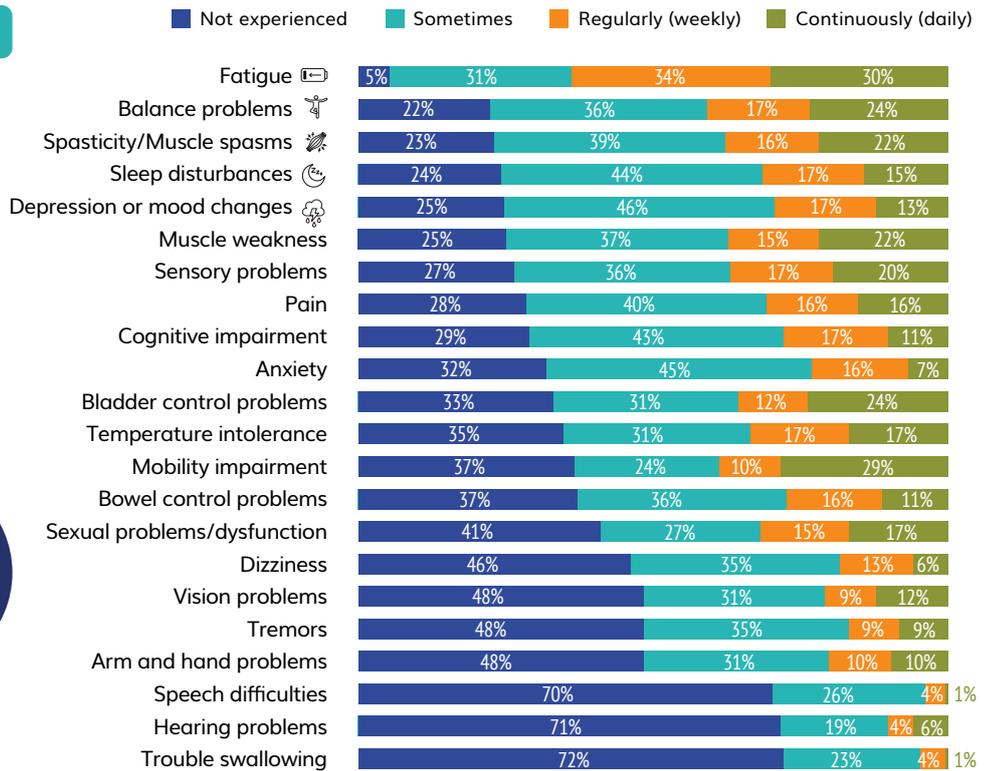
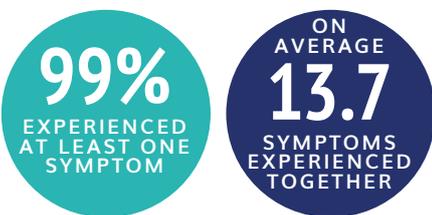
ON AVERAGE
4.1
YEARS DELAY BETWEEN DIAGNOSIS AND DMD START

Symptoms

PRESENCE AND PREVALENCE

The symptoms reported the most were **fatigue, balance problems, spasticity, sleep disturbances, and depression/mood changes**.

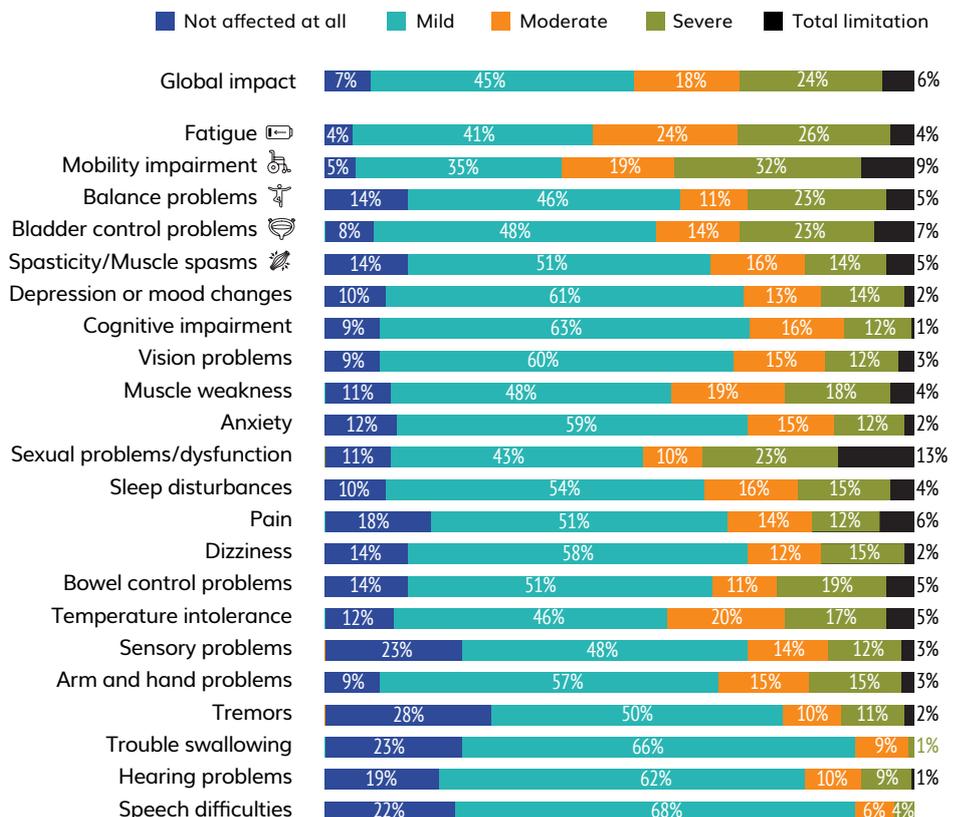
The symptoms least reported were **trouble swallowing, hearing problems, speech difficulties, arms and hand problems and tremors**.



SEVERITY AND IMPACT

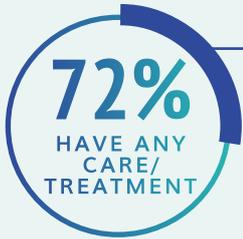
The symptoms that were affecting the daily lives of people with MS were **fatigue, mobility impairment, bladder control problems, arm and hand problems, cognitive impairment, and vision problems**⁴.

The top 3 most debilitating symptoms were **fatigue, mobility impairment, and balance problems**⁵.



Treatment and care

CARE FOR SYMPTOMS



28% don't use any care /treatment. The top reasons for not using a specific treatment were that they cannot afford this treatment, treatment was not offered to them or having no need.



People with MS reported using 5.5 treatments or care on average for their symptoms.

The most used treatments were*: **prescription medication, social support: friends and family, personal life modifications, and dietary supplements.**

Lifestyle changes



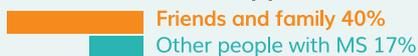
Medication for symptom management



Therapy/treatments



Social support



Complementary and alternative therapies



Other

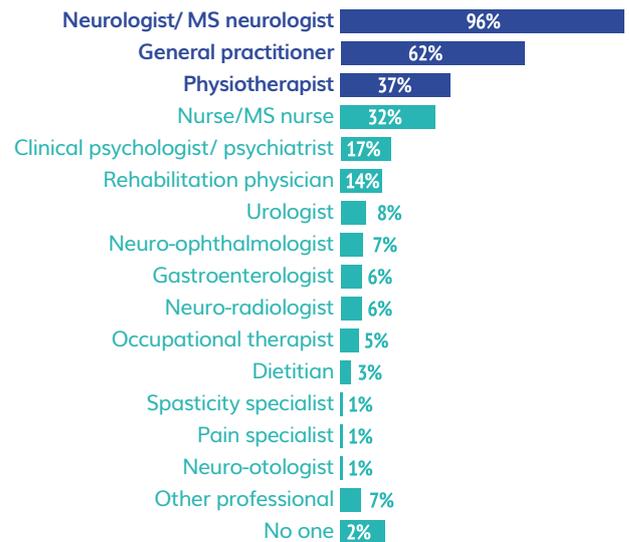


INVOLVEMENT OF PROFESSIONALS



People with MS had 3.1 healthcare professionals on average taking care of their MS. 38% reported that their healthcare professionals are coordinating together.

The most involved professionals were **neurologist, general practitioner, and physiotherapist***.



CAREGIVER PRESENCE AND ASSISTANCE



72% have no need for assistance

15% do not have caregivers but need assistance

13% have caregivers



Of those caregivers, **85%** were a family, partner, or friend. **22%** were paid professionals*.



The caregivers supported people with MS for 29.5 hours per week on average. **75%** of respondents mentioned that the carer was of **great or good** help to them.

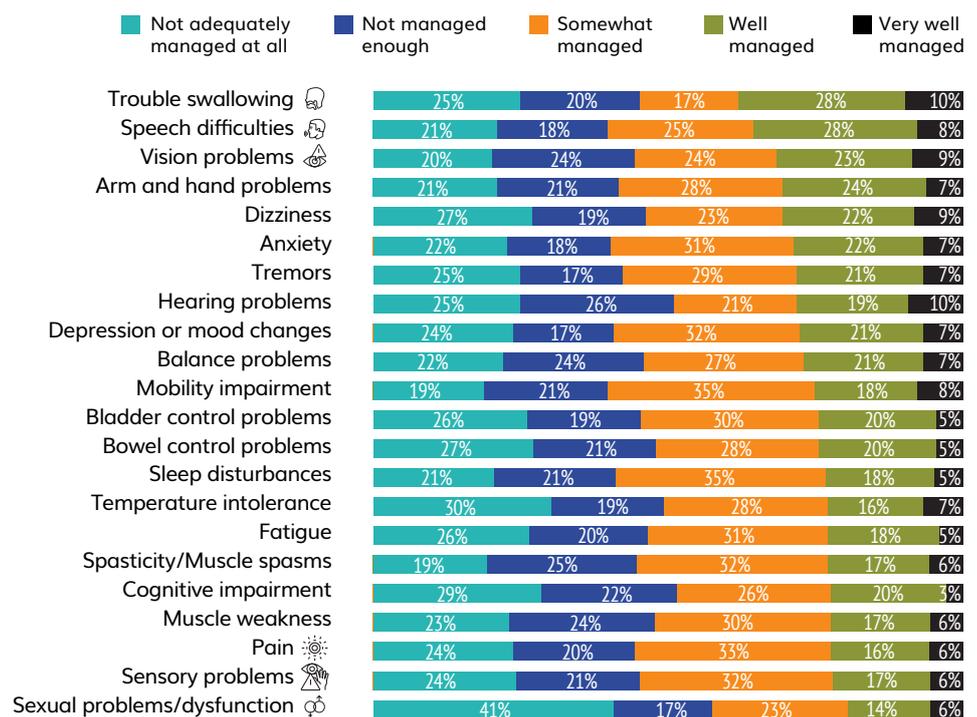
People living with SPMS reported having a caregiver (28%) or needing one (32%), comparable to people with PPMS, people with RRMS reported the most not having and not needing a caregiver (87%).

Satisfaction with management of symptoms

The most well managed symptoms were **trouble swallowing, speech difficulties, and vision problems**.

The least well managed symptoms were **sexual problems/dysfunction, sensory problems, and pain**.

3 in 4
NOT SATISFIED
WITH THEIR
CARE



The promise of change

As the IMSS initiative brings together people with MS, researchers, policymakers, and healthcare providers, we hope to have a future where no one has to face their symptoms alone. A future where MS care isn't just about managing symptoms but **empowering people to lead fulfilling lives**.

The story of MS isn't just about the condition; it's about the people living with it. And for Miljana, it's a story that continues, now with **the promise of a brighter tomorrow**.



Note: Percentages are rounded for simplicity and may not sum to 100% or match exactly.

*Participants were allowed to give more than one answer (multiple choice), hence the total can be more than 100%.

‡Gender: Prefer not to say: 0.2%

References: ¹Among respondents, 35% were MS society members, 25% were linked but not members, and 40% had no society affiliation. ²Measured by the PDDS: Patient-Determined Disease Steps, provided for use by the NARCOMS Registry: www.narcoms.org/pdds. NARCOMS is supported in part by the Consortium of Multiple Sclerosis Centres (CMSC) and the CMSC Foundation. ³Measured by EuroQOL Research Foundation: EQ-5D-5L. ⁴The tool used to measure the severity of symptoms is SymptoMScreen: <https://www.symptomscreen.org>, categorised into 5 groups: Not affected at all (0); Mild (1 and 2), Moderate (3), Severe (4 and 5), Total limitation (6). ⁵The 'Severity and Impact' chart is organized from the most to the least debilitating symptoms.

Acknowledgement: EMSP thanks people with MS and their caregivers across Europe for participating in this IMSS survey experience. EMSP thanks the Scientific Working Group which included MS experts and the national MS societies for their support. EMSP thanks the young people with MS who supported the development of the survey part of the Young People's Network, the MS International Federation, and GfK Spain (expert in Healthcare Market Research).

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