





Impact of Multiple Sclerosis Symptoms (IMSS) in Germany

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.

Anne'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 Germany, **2019**¹ people with MS participated in the IMSS survey from May 5 to August 31, 2023.

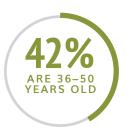
A Life Changed by MS

Anne had always been full of energy — a nurse and a passionate camper 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 long years, Anne lived with uncertainty, her daily life becoming a patchwork of pain, confusion, and questions without answers.



Participant demographics

44.5
THE MEAN AGE OF PEOPLE WITH MS











People between **18–35** reported the fewest symptoms across various domains.

Individuals aged **36–50** experienced the highest sleep disturbances.

Between **51-65**, sensory issues, balance problems, and mobility impairments became more prominent.

Over 65, these issues persisted, with the highest levels of balance problems, spasticity, muscle weakness, bladder and bowel problems, mobility impairment, and sexual dysfunction.



Females 80%

Males 19%

Females reported significantly fewer tremors but more sensory problems, cognitive impairment, sleep problems, depression or mood changes, heat/cold intolerance, pain, anxiety and hearing problems comparing to males.

Males reported significantly fewer sensory problems, cognitive impairment, sleep disturbances, depression or mood changes, heat/cold intolerance, pain, dizziness, anxiety and hearing problems, but more mobility problems and tremors than females.

WORKING STATUS

Part-time workers 26%

Full-time workers 37%

Not working due to MS

Not working, not due to MS

Student/ training 3%

Part-time workers reported high sleep disturbances, anxiety, and mood changes.

Full-time workers reported least presence of symptoms.

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

People not working not due to MS reported balance problems, spasticity, muscle weakness, bladder problems and mobility impairment.

Students and people in training reported highest anxiety.

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 Anne, these questions resonate deeply. Her diagnosis eventually came at age 34, but the journey didn't end there. Her symptoms — fatigue, sensory problems, trouble with her memory, and balance problems — 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.

Anne'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 Anne across the continent.

Clinical situation

DIAGNOSIS AND SYMPTOM ONSET

diaanosed

between 18-35 yrs

average disease duration have at least 1 additional illnesses

Delay from symptom onset to diagnosis



symptom onset age

AVERAGE DELAY OF 3.4 YEARS

average diagnosis age

TYPES OF MS

69% RRMS, Relapsing Remitting MS

10% PPMS,

Primary Progressive Progressive MS

15% SPMS, Secondary MS

6% **Unsure** of their MS type

DISABILITY LEVELS

21% of the respondents had mild disability

while 46% had moderate disability and 15% had severe disability. People living with PPMS reported more moderate (53%) and severe disability (37%) compared to RRMS. People with SPMS reported the most severe disability (52%)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 (21%) and people with SPMS (29%)3.

USE OF DMDs

86% of respondents have used **Disease Modifying**

Drugs (DMDs), with 74% currently using them. 66% reported less than a 1-year delay to start DMDs, while 9% experienced delays of 6 years or

more. Among non-users, the main reasons were:

- 42% concerns about use
- 24% never being offered
- 19% physicians advising against them.



Symptoms

PRESENCE AND PREVALENCE

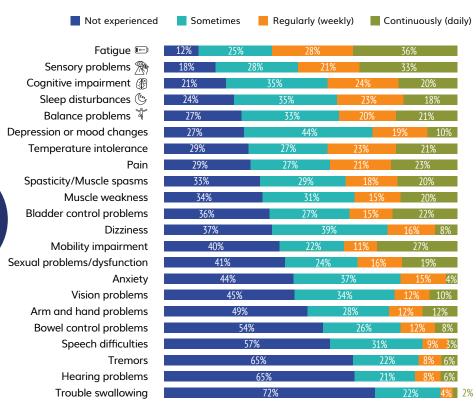
The symptoms reported the most were fatigue, sensory problems, cognitive impairment, sleep disturbances, and balance problems.

99%
EXPERIENCED
AT LEAST ONE
SYMPTOM

AVERAGE

13.4

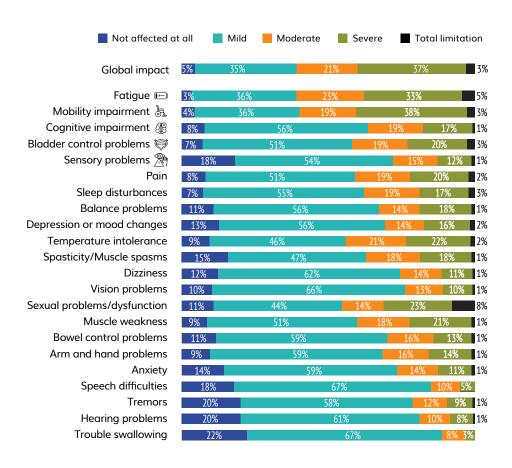
SYMPTOMS
EXPERIENCED
TOGETHER



SEVERITY AND IMPACT

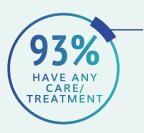
The symptoms that were affecting the daily lives of people with MS were fatigue, mobility impairment, bladder control problems, sleep disturbances and cognitive impairment⁴.

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



Treatment and care

CARE FOR SYMPTOMS



7% don't use any care /treatment. The top reasons for not using a specific treatment were having no need, treatment was not offered to them, or it takes a lot of time to take an appointment.



People with MS reported using 6 treatments or care on average for their symptoms.

The most used treatments were*: prescription medication, physical therapy, personal life modifications, and physical activity.

Lifestyle changes



Medication for symptom management

Prescription medication 65%
Non-prescription medication 33%

Therapy/treatments

Physical therapy 57%
Occupational therapy 15%
Psychological therapy 13%
Bladder and bowel management 11%
Neuro-cognitive rehabilitation 8%
Speech therapy 2%

Social support

Friends and family 37%
Other people with MS 17%
Formal sessions with social worker 2%

Complementary and alternative therapies

Dietary supplements 42%
Mindfulness 16%
Meditation 14%
Alternative medicine 13%
Other alternative therapy 9%

Other

Assistive devices 25%
At-home massage devices 16%
Diaries and applications 13%
Home modification 10%
Other 7%
Service/support animals 1%

Surgery 1%

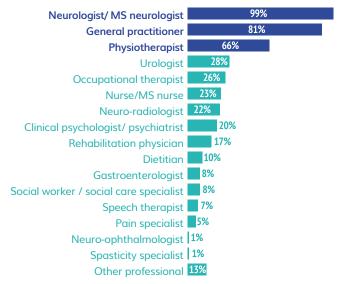
INVOLVEMENT OF PROFESSIONALS

HEALTHCARE PROFESSIONALS are ing ed that their healthcare

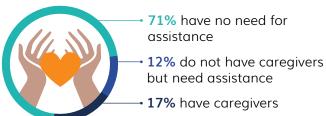
ON AVERAGE

People with MS had 4 healthcare professionals on average taking care of their MS. 43% reported that their healthcare professionals are coordinating together.

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



CAREGIVER PRESENCE AND ASSISTANCE



Of those caregivers, **90%** were a family, partner, or friend. **17%** were paid professionals*.





The caregivers supported people with MS for 16.4 hours per week on average. **57%** of respondents mentioned that the carer was of **great or good** help to them.

People living with SPMS reported having a caregiver (49%) or needing one (16%) while people with RRMS reported the most not having and not needing a caregiver (82%).

Satisfaction with management of symptoms

The most well managed symptoms were mobility impairment, spasticity/ muscle spasms, and muscle weakness.

The least well managed symptoms were sexual problems/dysfunction, heat and/or cold sensitivity or intolerance, hearing problems and cognitive impairment.



Not adequately managed at all	Not managed enough	Somewho managed		Very well managed
Mobility impairment 🚡	11%	6 3	4%	30% 8%
Spasticity/Muscle spasms 🚜	16%	19%	35%	23% 7%
Muscle weakness 🙈	16%	17%	40%	21% 6%
Arm and hand problems	18%	16%	39%	22% 5%
Bladder control problems	20%	19%	35%	19% 7%
Balance problems	18%	18%	38%	20% 5%
Depression or mood changes	21%	17%	37%	19% 6%
Pain	17%	24%	35%	19% 5%
Sensory problems	23%	17%	38%	18% 5%
Anxiety	24%	18%	36%	16% 6%
Vision problems	23%	20%	38%	14% 6%
Tremors	23%	17%	43%	14% 4%
Sleep disturbances	25%	21%	36%	13% 4%
Dizziness	24%	21%	37%	14% 3%
Trouble swallowing	30%	15%	37%	14% 4%
Fatigue	29%	25%	30%	12% 4%
Bowel control problems	28%	20%	37%	11% 5%
Speech difficulties	33%	15%	37%	12% 3%
Cognitive impairment	28%	22%	35%	11% 4%
Hearing problems 🛭 🕞	31%	19%	34%	11% 4%
Temperature intolerance 🐇	33%	19%	33%	11% 3%
iexual problems/dysfunction 💠	41	%	16% 30%	10% 3%

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 wait years for answers. 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 Anne, 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: Non-binary: 0.2%, prefer not to say 0.3%.

References: ¹Among respondents, 49% were MS society members, 14% were linked but not members, and 37% 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).

Funding: This project has been financially supported by Almirall, Biogen, Bristol Myers Squibb, Coloplast, Merck, Novartis, Roche, and Sanofi.