





Impact of Multiple Sclerosis Symptoms (IMSS) in Norway

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 Norway, **1,073**¹ people with MS participated in the IMSS survey from May 5 to August 31, 2023.

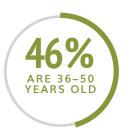
A Life Changed by MS

Anne had always been full of energy — a nurse and passionate skiier in her free time. But at 30, 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 four and a half years, Anne lived with uncertainty, her daily life becoming a patchwork of pain, confusion, and questions without answers.



Participant demographics

44.9
THE MEAN AGE
OF PEOPLE
WITH MS











People between **18–35** reported the most anxiety but report the least of other symptoms.

Individuals aged **36–50** experienced the highest sensory and cognitive impairments but less muscle weakness, bowel problems, and mobility impairment.

Between **51-65**, low dizziness, vision, speech, and tremor issues but high pain, spasticity, sexual problems, and trouble swallowing.

Over 65, balance problems, muscle weakness, bowel/ bladder problems, and mobility impairment peak, while anxiety, depression, and cognitive impairment are the least.



Females **84%**

Males 16%

Females reported significantly fewer spasticity problems, mobility impairment, hand and arm problems, and tremors but more cognitive impairment, dizziness, and trouble swallowing compared to males.

Males reported significantly fewer fatigue, cognitive impairment, dizziness, and trouble swallowing, but more spasticity problems, mobility impairment, hand and arm problems, and tremors than females.

WORKING STATUS

Part-time workers 24%

Full-time workers 33%

Not working due to MS 37%

Not working, not due to MS 4%

Student/ training 2%

Part-time workers experienced more fatigue.

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

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

Students and people in training reported high vision and hearing problems.

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 35, but the journey didn't end there. Her symptoms — fatigue, cognitive impairment, sensory problems, 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 4.2 YEARS

average diagnosis age

TYPES OF MS

59% RRMS, Relapsing Remitting MS

13% PPMS, Primary

MS

SPMS, Secondary Progressive Progressive MS

11%

17% **Unsure** of their MS type

DISABILITY LEVELS

23% of the respondents had mild disability while

44% had moderate disability and 9% had severe disability. People living with PPMS reported similar moderate disability (45%) as people living with RRMS, but more severe disability (25%) than both RRMS and PPMS.

QUALITY OF LIFE

The majority of respondents had no or

slight problems, while 4.8% were experiencing moderate or severe problems affecting their quality of life. The quality of life deteriorated more among people with PPMS (9%) and people with SPMS (10%) compared to RRMS³.

USE OF DMDs

89% of respondents have used **Disease Modifying**

Drugs (DMDs), with 71% currently using them. 69% reported less than a 1-year delay to start DMDs, while 10% experienced delays of 6 years or

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

- 14% concerns about use
- 59% never being offered
- 11% physicians advising against them.



Symptoms

PRESENCE AND PREVALENCE

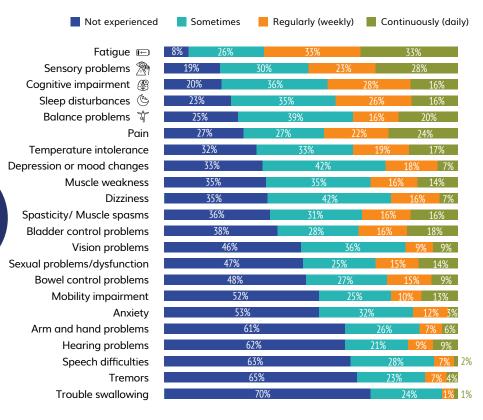
The symptoms reported the most were fatigue, sensory problems, cognitive impairment, sleep disturbances, and balance problems.

99%
EXPERIENCED
AT LEAST ONE
SYMPTOM

AVERAGE

13

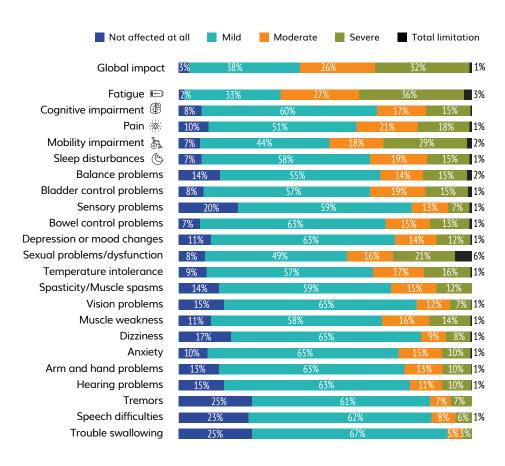
SYMPTOMS
EXPERIENCED
TOGETHER



SEVERITY AND IMPACT

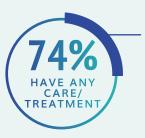
The symptoms that were affecting the daily lives of people with MS were fatigue, mobility impairment, sleep disturbances, bowel control problems, and sexual problems⁴.

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



Treatment and care

CARE FOR SYMPTOMS



26% 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 they cannot afford this treatment.



People with MS reported using 4.8 treatments or care on average for their symptoms.

The most used treatments were*: prescription medication, physical activity, social support: friends and family, and physical therapy.

Lifestyle changes



Physical activity 46%
Personal life modifications 30%
Dietary changes 23%
Quitting smoking 3%

Medication for symptom management



Prescription medication 49%Non-prescription medication 19%

Therapy/treatments



Physical therapy 30%
Bladder and bowel management 11%
Psychological therapy 5%

Neuro-cognitive rehabilitation 4%
Occupational therapy 3%

Social support



Friends and family 32%

Other people with MS 13%

Formal sessions with social worker 2%

Complementary and alternative therapies



Dietary supplements 22% Mindfulness 9%

Meditation 6%

Other alternative therapy 4%
Alternative medicine 4%

Other



Assistive devices 19% Home modification 7%

At-home massage devices 6% Diaries and applications 5%

Other 4%

Service/support animals 1%

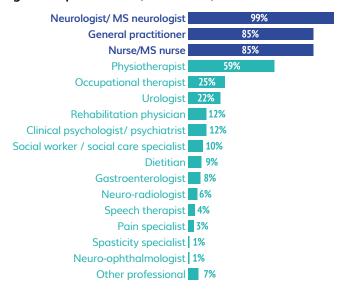
Surgery 1%

INVOLVEMENT OF PROFESSIONALS

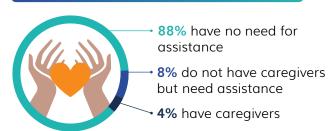
AVERAGE
4.5
HEALTHCARE
PROFESSIONALS

People with MS had 4.5 healthcare professionals on average taking care of their MS. 68% reported that their healthcare professionals are coordinating together.

The most involved professionals were **neurologist**, **general practitioner**, and **nurse/ MS nurse***.



CAREGIVER PRESENCE AND ASSISTANCE



Of those caregivers, **69%** were a family, partner, or friend. **38%** were paid professionals*.



NAVERAGE 17.8 HOURS/WEEK

The caregivers supported people with MS for 17.8 hours per week on average. **62%** of respondents mentioned that the carer was of **great or good** help to them.

People living with PPMS and SPMS reported similar needs for a caregiver with 9-10% having a caregiver and 10-11% needing one while people with RRMS reported the most not having and not needing a caregiver (90%).

Satisfaction with management of symptoms

The most well managed symptoms were mobility impairment, bladder control problems, and arm and hand problems.

The *least* well managed symptoms were **fatigue**, **sexual problems/ dysfunction**, and **anxiety**.

2 in 5
NOT SATISFIED
WITH THEIR
CARE

Not adequately managed at all	Not manag enough		omewhat anaged	Well manag		ery well managed
Mobility impairment 🔈	6% 17	7%	33%		37%	7%
Bladder control problems 🦃	9% 1	3%	34%		33%	10%
Arm and hand problems 🦓	12%	20%	30%		26%	119
Balance problems	11%	19%	33%		28%	9%
Muscle weakness	12%	19%	33%		28%	7%
Tremors	16%	19%	30%		24%	119
Vision problems	14%	18%	33%		25%	9%
Bowel control problems	13%	19%	35%		25%	8%
Trouble swallowing	18%	17%	32%	6	25%	8%
Spasticity/Muscle spasms	11%	22%	349	%	25%	9%
Speech difficulties	18%	18%	32	2%	24%	9%
Sensory problems	16%	22%	3	51%	22%	9%
Dizziness	14%	24%	3.	2%	23%	8%
Hearing problems	20%	19%	3	1%	22%	9%
Depression or mood changes	17%	19%	3	4%	23%	7%
Pain	13%	23%	3.	5%	24%	5%
Temperature intolerance	19%	22%		31%	21%	8%
Sleep disturbances	17%	22%		33%	22%	6 5%
Cognitive impairment	19%	25%	ó	31%	19	5%
Anxiety 👸	16%	20%		40%	18	% 6%
Sexual problems/dysfunction 🌣	279	%	26% 25%		17	7% 6%
Fatigue 🦠	26%	6	27%	26%	16	5% 5%

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 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: 0.1%, prefer not to say: 0.1%

References: ¹Among respondents, 87.1% were MS society members, 6.7% were linked but not members, and 6.2% 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.

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