





Impact of Multiple Sclerosis Symptoms (IMSS) in Iceland

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.

Kristín'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 Iceland, **269**<sup>1</sup> people with MS participated in the IMSS survey from May 5 to August 31, 2023.

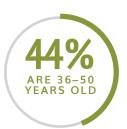
# A Life Changed by MS

Kristín had always been full of energy — a teacher and a passionate painter in her free time. But at 29, her life took an unexpected turn. She started noticing strange sensations in her hands, 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 five long years, Kristín lived with uncertainty, her daily life becoming a patchwork of pain, confusion, and questions without answers.



# **Participant demographics**













People between **18–35** reported low symptom levels overall.

Individuals aged **36–50** experienced the highest anxiety, depression or mood changes, and arm and hand problems.

Between **51-65**, people reported the lowest cognitive impairment, anxiety, and depression or mood changes but showed high levels of sensory problems, balance issues, bladder control problems, spasticity, muscle weakness, and mobility impairment.

### **GENDER**

Females 79%

Males 21%

Females reported significantly fewer spasticity problems and arm and hand problems but more temperature intolerance compared to males.

Males reported significantly fewer sensory problems, temperature intolerance and vision problems, but more spasticity problems, and arm and hand problems than females.

## **WORKING STATUS**

Part-time workers 21%

Full-time workers 43%

Not working due to MS 27%

Not working, not due to MS 7%

Student/ 79/

Part-time workers experienced the highest muscle weakness and speech difficulties.

trainina

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

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

The sample size of other groups 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 Kristín, these questions resonate deeply. Her diagnosis eventually came at age 34, but the journey didn't end there. Her symptoms — fatigue, numbness, memory problems, and pain — 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.

Kristín'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 Kristín 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** 4.9 YEARS

average diagnosis age

## TYPES OF MS

72% RRMS, Relapsing Remitting MS

11% PPMS, Primary

10% SPMS, Secondary Progressive Progressive MS MS

8% **Unsure** of their MS type

## **DISABILITY LEVELS**

10% of the respondents had mild disability

while 34% had moderate disability and 11% had severe disability. People living with PPMS reported more moderate (53%) and severe disability (29%) compared to RRMS. People with SPMS reported the most severe disability (35%)<sup>2</sup>.

## **QUALITY OF LIFE**

The majority of respondents had no or

slight problems, while 8% were experiencing moderate or severe problems affecting their quality of life. The quality of life deteriorated more among people with PPMS (28%) and people with SPMS (11%)3.

## **USE OF DMDs**

84% of respondents have used Disease Modifying

Drugs (DMDs), with 71% currently using them. 62% reported less than a 1-year delay to start DMDs, while 8% experienced delays of 6 years or more. Among non-users,

the main reasons were:

- 29% concerns about use
- 33% never being offered
- 27% physicians advising against them.



## **Symptoms**

### PRESENCE AND PREVALENCE

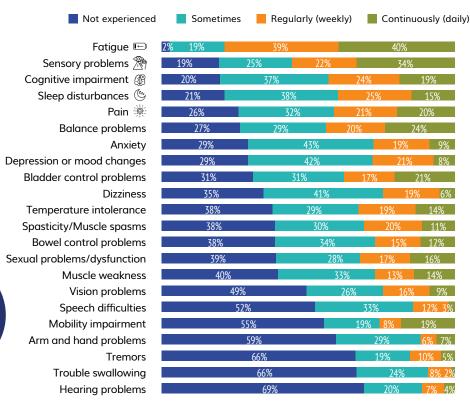
The symptoms reported the most were fatigue, sensory problems, cognitive impairment, sleep disturbances, and pain.

99%
EXPERIENCED
AT LEAST ONE
SYMPTOM

AVERAGE

13.5

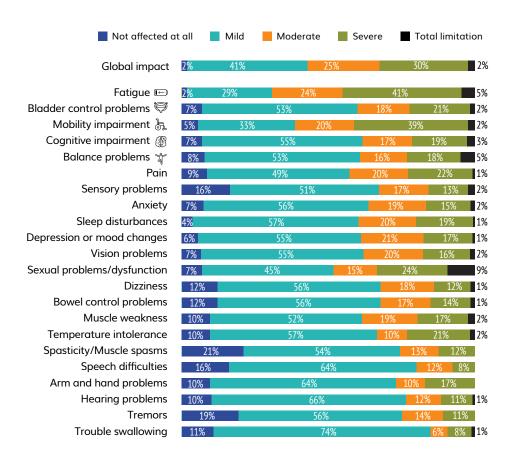
SYMPTOMS
EXPERIENCED
TOGETHER



## **SEVERITY AND IMPACT**

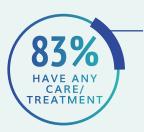
The symptoms that were affecting the daily lives of people with MS were fatigue, sleep disturbances, mobility impairment, depression and mood changes and bladder control problems<sup>4</sup>.

The top 3 most debilitating symptoms were **fatigue**, **bladder control problems**, and **mobility impairment**<sup>5</sup>.



## Treatment and care

### **CARE FOR SYMPTOMS**



17% 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 5.5 treatments or care on average for their symptoms.

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

## Lifestyle changes



#### Medication for symptom management

Prescription medication 61%
Non-prescription medication 23%

#### Therapy/treatments

Physical therapy 32%
Psychological therapy 13%
Bladder and bowel management 11%
Neuro-cognitive rehabilitation 3%
Occupational therapy 1%
Speech therapy 1%

#### Social support

Friends and family 34%
Other people with MS 15%
Formal sessions with social worker 3%

### Complementary and alternative therapies



#### Other



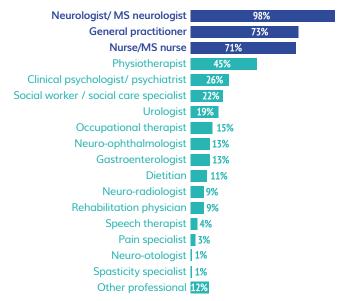
# INVOLVEMENT OF PROFESSIONALS

AVERAGE

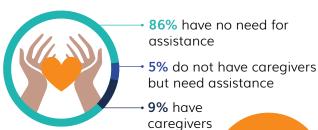
HEALTHCARE
PROFESSIONALS

People with MS had 4.4 healthcare professionals on average taking care of their MS. 56% 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, **72%** were a family, partner, or friend. **37%** were paid professionals\*.

3 in 4

ARE A FAMILY, PARTNER OR FRIEND

NAVERAGE 19.2 HOURS/ WEEK

The caregivers supported people with MS for 19.2 hours per week on average. **84%** of respondents mentioned that the carer was of **great or good** help to them.

People living with SPMS reported having a caregiver (23%) or needing one (11%), slightly less than people with PPMS, 29% with caregiver and 18% needing one. People with RRMS reported the most not having and not needing a caregiver (93%).

## Satisfaction with management of symptoms

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

The *least* well managed symptoms were **dizziness**, **fatigue**, and **hearing problems**.



Not adequately managed at all	Not managed enough	Some mana		Vell nanaged	Very well managed
Arm and hand problems	15% 13	%	35%	29%	8%
Mobility impairment 🚴	12% 19	%	35%	27%	8%
Tremors 💹	18%	20%	30%	25%	7%
Bladder control problems	20%	20%	29%	22%	10%
Speech difficulties	20%	21%	28%	23%	9%
Bowel control problems	22%	23%	25%	249	6%
Anxiety	19%	23%	30%	22	% 7%
Sleep disturbances	14%	23%	35%	219	<sup>6</sup> 7%
Muscle weakness	18%	18%	37%	22	% 6%
Depression or mood changes	20%	19%	34%	2	3% 4%
Balance problems	18%	23%	33%	2	0% 6%
Sensory problems	19%	28%	28%		21% 4%
Trouble swallowing	20%	22%	34%	1	9% 6%
Cognitive impairment	22%	24%	319	6	17% 7%
Temperature intolerance	23%	23%	31	%	17% 6%
Pain	17%	28%	33	%	18% 4%
Spasticity/Muscle spasms	12%	2%	45%		17% 4%
Vision problems	23%	20%	379	%	16% 5%
Sexual problems/ dysfunction	30%		26%	23%	17% 3%
Hearing problems 🔮	23%	27%		30%	16% 4%
Fatigue 🕒	18%	28%		66%	14% 4%
Dizziness 🍖	24%	19%	40	%	12% 4%

# 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 Kristín, 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: 0.5%.

References: ¹Among respondents, 80.3% were MS society members, 9% were linked but not members, and 10.7% 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), Maderate (3) Severe (4 and 5). Total limitation (5) \*The (5) Severity and lapace) chart is crangized from the most to the least debilitating symptoms.

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