



# NEWSLETTER

## December 2023

Dear reader,

Welcome to the second issue of the AI-Mind study newsletter!

As we embark on this journey of discovery, we invite you to explore the advancements in dementia research and the ongoing progress of the AI-Mind project. Released every four months, this newsletter aims to keep you informed about methodologies for early dementia diagnosis, research on dementia-related topics and lifestyle interventions. By staying engaged, you'll gain an understanding of our project's potential impact on dementia research.

Our sincere gratitude goes to all the dedicated participants in the AI-Mind study. Your commitment has been instrumental in advancing our knowledge of brain function. Stay informed, stay inspired!

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## Meet Dr Ira Haraldsen, the AI-Mind project coordinator

### What inspired you to become a clinician/researcher?

From a young age, even as a school student, I was curious about the challenges in research and had a strong desire to contribute to medical progress to help others. I was always on the lookout for new solutions. I had the privilege of studying at wonderful universities and gaining experience in various work settings, meeting impressive medical doctors along the way. I aimed to achieve as much as my idols did.

### What are your interests and hobbies outside of work?

Outside of work, I enjoy reading, watching movies, and spending time in nature. These activities help me recharge, allowing me to approach my AI-Mind work and research with renewed energy.

### Are there any tips or advice for participants of the study to have a comfortable experience?

I want to assure participants that it is important for them to feel at ease and ask any questions they may have. In Norway, we plan to offer informative webinars at different times to suit everyone's schedules. We hope participants will enjoy more regular updates about AI-Mind, creating a sense of community.

### Any memorable moments from meeting AI-Mind study participants?

It is truly heartening to hear about the motivation and willingness of our participants. Their enthusiasm significantly contributes to the success of the AI-Mind research. We will introduce personal reports as soon as possible to honour the positive engagement of each participant in our study, creating a more connected and engaged group.

## About the Alzheimer Europe Conference

Several AI-Mind members had the opportunity to travel to Helsinki (Finland) in October to attend the 33rd Alzheimer Europe Conference. A record number of over 1,100 participants (1,000 of these in person) from 48 countries attended the conference including people living with dementia, families, carers and supporters, as well as volunteers and staff of Alzheimer associations, policy makers, health and social care professionals, researchers, academics and industry representatives from all over Europe and beyond. A major highlight was the first plenary session showcasing the work of the European Working Group of People with Dementia (EWGPWD) in relation to Public Involvement in dementia research and advocacy. The speakers drew on their personal experiences, both at national and European level. This was the first plenary session of its kind, organised, chaired and presented entirely by people living with dementia.

Also AI-Mind made significant contributions, leaving a lasting impact. The project hosted a well-attended session on „The potential of artificial intelligence for dementia risk prediction” attracting over 70 participants. Chaired by Dr Ira Haraldsen, our project coordinator, the session featured insightful presentations and ended with a lot of questions from the audience. Lilo Klotz, a member of the EWGPWD, expressed gratitude, thanking the speakers and all researchers for their contributions to the field. In addition, PhD students involved in AI-Mind also showcased their work through oral and poster presentations, fostering lively discussions. The AI-Mind booth provided a direct avenue for attendees, including those affected by dementia, to connect with researchers and learn more about the ongoing research with the use of Artificial Intelligence (AI) and the AI-Mind study.



**Watch the video from the AI-Mind session on our YouTube channel!**



[https://www.youtube.com/@AIMind\\_eu/featured](https://www.youtube.com/@AIMind_eu/featured)

# Prevalence of dementia

**Dementia** is a term encompassing several diseases that affect memory, thinking, and the ability to perform daily activities.

As the primary risk factor for dementia is age, the continued increase in life expectancy resulting in an ageing population further increases the likelihood of people developing the condition. Currently more than 55 million people have dementia worldwide. Every year, there are nearly 10 million new cases.

The numbers of people with dementia are expected to almost triple in Europe by 2050.

**Women** are disproportionately affected by dementia. More women than men live with dementia at any age group (apart from the 40-59 age band), with the gap increasing at older ages. In fact, around twice as many women have dementia.

The main reason for this greater risk is because women live longer than men and old age is the biggest risk factor for this disease but further research is being conducted to explore the reasons for the higher prevalence of dementia in women.

## Overview of the global situation

**55 million**

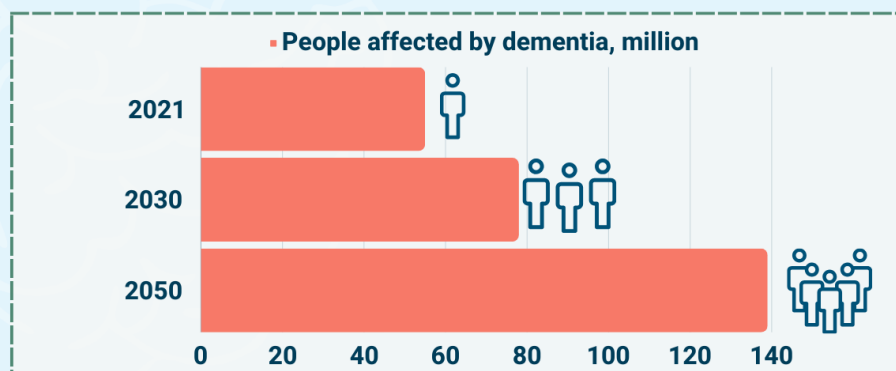
people affected by dementia worldwide in 2021, or roughly **5% of the world's elderly population**

**10 million**

people **develop dementia each year**

**x 3 times**

dementia cases set to triple: 78 million in 2030 and **139 million by 2050**

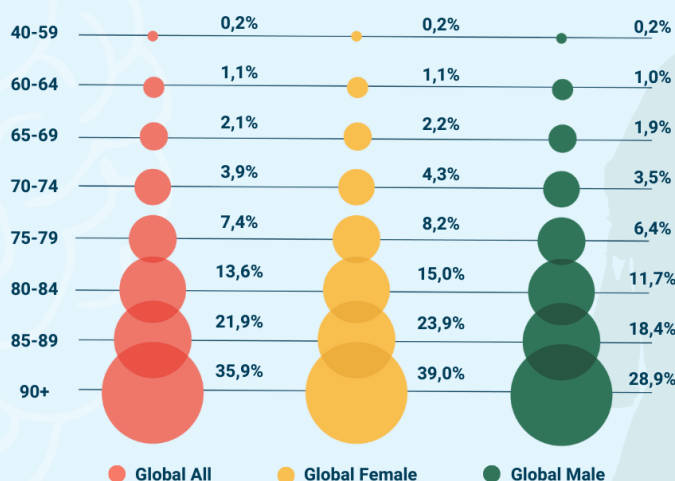


Source: WHO, 2021

## Global dementia prevalence rates by sex and age

**Women with dementia outnumber men**

Across all regions of the world, dementia disproportionately affects women



Source: WHO, 2021

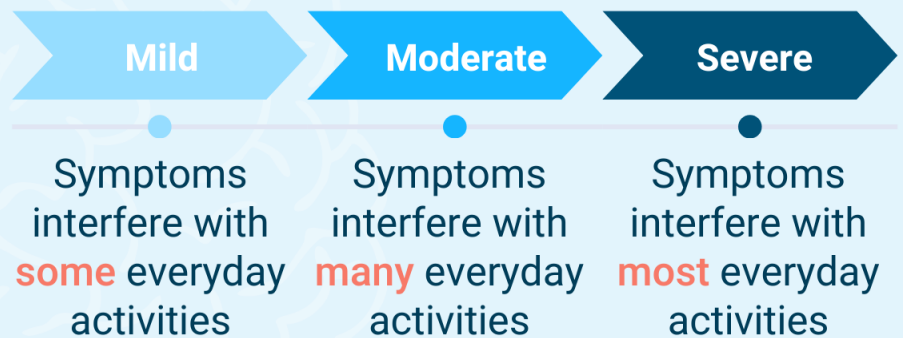
## The Alzheimer's disease continuum

Alzheimer's disease begins many years before symptoms become apparent (preclinical stage), and develops gradually over time.

It is usually described in terms of stages, sometimes called mild, moderate and severe, indicating the severity of the symptoms. However, the progression along the Alzheimer's disease continuum varies widely from person to person.

### Alzheimer's disease continuum

Dementia due to Alzheimer's disease



### More information

You can find more information about dementia, risk factors and challenges in the following sources:

- **Alzheimer Europe - Prevalence of dementia in Europe**  
<https://www.alzheimer-europe.org/resources/publications/dementia-europe-yearbook-2019-estimating-prevalence-dementia-europe>
- **Alzheimer's Disease International – Women and dementia**  
<https://www.alzint.org/resource/women-and-dementia-a-global-research-review/>
- **Alzheimer Europe - the Alzheimer's disease continuum**  
<https://www.alzheimer-europe.org/dementia/alzheimers-dementia>

## What is the AI-Mind study about?

The study is at the heart of our project and it helps to develop and validate AI-based tools to predict who is likely to develop dementia. The AI-Mind study, launched in January 2022, is the largest European study of this kind and involves 1,000 participants across four countries.

# 1000

**participants in total  
have joined the AI-Mind study  
in five European  
clinical centres**

You can monitor our progress on the AI-Mind study page:  
[www.ai-mind.eu/study](http://www.ai-mind.eu/study)



With 254 participants enrolled in Norway, 271 in Italy, 257 in Spain and 218 in Finland, AI-Mind recently reached its ambitious goal of 1000 participants.

The full enrollment of participants has been achieved in Norway, Italy and Spain, whereas in Finland, our clinical partners are still recruiting new participants to reach 250.

At the moment, participants to the AI-Mind study are visiting the clinical sites for their second and third visits.

The long commute for the clinical site has been noted as one of the challenges by some of the study participants. AI-Mind team members provide as much support as possible to try to resolve any problems for people involved in the study.