Experts call for patient care guidelines and effective therapies to combat Alzheimer’s

Some 47 million people worldwide suffer from some form of dementia. Scientists are working feverishly to find a cure for the most common form, Alzheimer’s. At the Congress of the European Academy of Neurology in Copenhagen, Prof Gunhild Waldemar issued an appeal for researchers to work together and draw up standardised guidelines for early identification and treatment of the disease.

Copenhagen, 30 May 2016 – Scientists are yet to develop effective treatments for Alzheimer’s. And pressure to achieve a breakthrough in the fight against the condition has never been so high. “European science could play a leading role, providing that it adopts a concerted approach and sufficient funds are made available. While research is expensive, standing by helplessly is even more so,” noted Prof Gunhild Waldemar, Director of the Danish Dementia Research Centre, at the Second Congress of the European Academy of Neurology (EAN) in Copenhagen.

Dementia costs up to EUR 72,500 per person per year

Accounting for up to 70 percent of cases, Alzheimer’s is the most widespread type of dementia. The risk of developing dementia increases with age, and experts expect the number of cases worldwide to rise from 47 million in 2015 to 75 million by 2030 due to demographic changes. In addition to the human cost, this will also bring significant economic problems in its wake: a multinational study of 1,222 patients from Spain, Sweden, the United Kingdom and the United States put the cost to society of relatively independent dementia patients at around EUR 14,500 per annum. For patients who require institutional care, this amount rises to EUR 72,500 a year. The cost of dementia to the global economy in 2015 has been estimated at an eye-watering USD 818 billion. In Europe alone, the cost of dementia in 2010 was calculated at somewhere between USD 105.6 billion and USD 238.6 billion.

Early identification through biomarkers, gene testing and imaging

To date, there is still no treatment that can halt or reverse the progress of the disease. “For this to happen we would need a better understanding of the neurodegenerative mechanisms,” Prof. Waldemar explained. “The assumption that dementia is simply an unavoidable part of getting old is plain wrong: half of people aged 90 do not suffer from memory disorders.”

Modern imaging technology and biomarkers are playing a greater role than ever before in determining the efficacy of new medicines. Imaging, biomarkers in the blood or spinal fluid and genetic testing can all support prognoses or early diagnosis of Alzheimer’s – even in
people who demonstrate few or no symptoms of the condition. However, such procedures are not without their dangers, as incorrect interpretation of biomarker test results designed to determine the probability of dementia can have far-reaching consequences. As Prof Waldemar explained: “In future we will need medical, ethical and legal guidelines to determine what form these tests should take, when they are appropriate and to guide pre-biomarker counselling in patients.” She also called for comprehensive, evidence-based public health programmes to prevent Alzheimer’s or delay the onset of the disease. A host of studies related to these areas were presented at this year’s EAN Congress.

Coffee protects memory function

There was good news at the EAN Congress for passionate coffee drinkers: a group of Finnish researchers have identified a mechanism that appears to show how regular coffee consumption can reduce the risk of developing Alzheimer’s. As proven by the long-term, Cardiovascular Risk Factors, Ageing and Dementia (CAIDE) study, which was presented at the EAN Congress, daily consumption of four to five cups of coffee in middle age leads to lower atrophy of the medial temporal lobe in old age – the same part of the brain that is vital for memory function.

Psychotropic drugs overprescribed despite insufficient evidence of efficacy

Prof Waldemar rates the care currently provided for dementia patients as unsatisfactory. A raft of studies presented at the EAN Congress show that dementia patients are often treated with unsuitable or controversial medication. A Danish study revealed how often dementia patients with neuropsychiatric symptoms are prescribed antipsychotics and other psychotropic medicines, although their effectiveness in such cases has not been fully proven and the cocktail of drugs is potentially dangerous. Register data for a group of around 35,000 patients showed that one in four patients were given more than two psychotropic drugs. Of the approximately 5,400 patients who received antipsychotics, three out of four received additional psychotropic substances during the course of treatment.

Another Danish study looked at regional differences in the prescription of antipsychotic drugs for dementia patients. Register data from 2012 show that the prevalence of antipsychotics in the 98 municipalities covered by the study ranged from 7.6 to 32.9 percent. “The fact that some places are prescribing almost five times as many antipsychotics for dementia patients cannot be explained by variables such as age or gender. We need evidence-based guidelines for pharmacological treatment and more training for everyone involved in primary health care,” Prof Waldemar explained.

She also criticised the tendency to overlook and undertreat other health problems faced by dementia patients. A recent Swedish study found evidence of insufficient medical treatment: of the approximately 29,600 patients covered by the study, around 5,700 suffered from atrial fibrillation, a heart rhythm disorder that can trigger strokes. Although anticoagulants are recommended to treat atrial fibrillation, just 40 percent of patients were given warfarin. The probability that a patient would receive this stroke-preventing drug was also found to decline in line with their cognitive deficits.

dementia: a nationwide study; EAN 2016 Abstract Eskelinen M et al, Midlife coffee drinking and dementia related brain changes on MRI up to 28 years later; Plenary Lecture 02-2 Scheltens P, Imaging of Alzheimer’s disease; Plenary Lecture 02-3, Filippi M Imaging of frontotemporal dementia