Mild cognitive impairment in older people around the world

The global population is ageing rapidly, and bringing with it an increase in the number of people experiencing physical and mental health conditions associated with older age. Mild cognitive impairment (MCI) is a common condition among older adults. It describes a decline in the ability to think or learn and remember that is greater than expected for one's age, but not severe enough to be classified as dementia. People with MCI may have difficulties with daily tasks that are cognitively demanding, such as finding their way in an unfamiliar place or taking a message for someone else.

A number of people with MCI will get worse and develop dementia, most likely Alzheimer's disease. However, others will not get worse and some may even recover. Because MCI affects quality of life and increases the risk of dementia, it is important to know how many people have the condition, that is, the prevalence of MCI.

Previous studies that investigated the prevalence of MCI among older people have reported very different results, from as low as 3% to as high as 42%. Some of this variability could be because the studies were from different countries and investigated people of different races or ethnicities. However, differences in how the studies defined and diagnosed MCI are probably largely to blame. For example, different studies have used different numbers or types of cognitive tests, and some required lower test scores than others for MCI to be diagnosed.

The aim of our study was to more accurately determine and compare the prevalence of MCI among groups of older people from around the world. We obtained cognitive test scores for people aged 60 or more years from 11 studies belonging to an international collaboration called COSMIC (Cohort Studies of Memory in an International Consortium). The studies were from countries that included the USA, United Kingdom, France, Hong Kong, Italy, Australia, Singapore, and Spain. Instead of the different approaches for diagnosing MCI originally used by these studies, we applied a single approach to all. This involved using statistical methods to make the different types of cognitive tests used by each study more comparable, similar to creating a test that was the same for everyone.

When we used this single approach to make diagnoses, the prevalence of MCI was much more similar across studies and countries than previously indicated. Of everyone from all studies, 5.9% had MCI. We also found that the prevalence of MCI increased with age, from 4.5% for people in their 60s, to 7.1% for people in their 80s. There was no difference in the prevalence of MCI between men and women, but people who did not have a high school level education were more likely than others to have MCI.

Our study suggests that the prevalence of MCI does not differ much around the world, and that the causes of MCI may be largely the same for people of different races/ethnicities and living in different countries. This information will help to determine what the causes are, and to develop

preventative measures or treatments for MCI that can be used around the globe. Knowing how many people have MCI is important for current public health policy. The rapidly ageing global population means this knowledge is also important for future planning and resource allocation, to cope with a greater number of people affected by MCI, and with a greater number of people who will get worse and develop dementia. Increased educational opportunities in developing nations may help to ease the future global burden of MCI and dementia.

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Publication

The Prevalence of Mild Cognitive Impairment in Diverse Geographical and Ethnocultural Regions: The COSMIC Collaboration.
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