



THE UNIVERSITY *of* EDINBURGH

News Release

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Dementia rates higher for people in the north than the south

How far north a person lives could influence their risk of developing dementia, a study suggests.

Researchers say that a higher occurrence of dementia among people living in northern parts of Scotland and Sweden suggests that environmental factors – such as levels of sunlight – may influence adults' risk of developing the disease.

Scientists say that the finding could help halve rates of dementia, which affects 850,000 people in the UK and 36 million worldwide.

Researchers from the University of Edinburgh carried out two studies mapping the disease – one in Scotland among people born in 1921 and the other, in Swedish twins.

In Sweden, the further north people lived, the greater their risk of dementia.

Researchers found that twins living in the north were two or three times more likely to develop dementia compared with those in the south, after they accounted for factors such as age, gender, and genes.

In Scotland, the study revealed a substantial change in disease risk depending on where people lived as an adult. There was no change in risk linked to where people lived as children.

Experts say that this variation is likely to be caused by common environmental factors that affect people in adulthood – such as lack of sunlight exposure and Vitamin D, which has been linked to healthy brain function and dementia.

Dr Tom Russ, of the University of Edinburgh's Alzheimer Scotland Dementia Research Centre and the Division of Psychiatry, says: "If this geographical variation in dementia risk is the result of one or more environmental risk factors, and if these could be improved in the whole population, our findings suggest that it might be possible to halve dementia rates."

The study, which is published in the journal *Epidemiology*, was supported by Alzheimer Scotland.

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