

NEWS

Large cohort study is launched to find causes of stroke and dementia in India

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New Delhi

India and the Netherlands have jointly launched a large cohort study to examine the causes of stroke and dementia in the Indian population.¹

The study will be conducted by the All India Institute of Medical Sciences in New Delhi, in collaboration with the National Brain Research Centre in Manesar, Haryana, and Erasmus MC, the medical centre of Erasmus University in Rotterdam, the Netherlands.

India's Department of Biotechnology, which is part of the Ministry of Science and Technology, has earmarked 340m rupees (£3.3m; €4m; \$5.4m) for the project, which is slated to start in a year's time. A cohort of 15 000 people above the age of 50 will be recruited from two sites in northern India—one urban and one rural.

At the beginning of the study all participants will undergo a detailed health examination including a blood test, electrocardiography, magnetic resonance imaging, a carotid Doppler test, and echocardiography, as well as a psychometric test.

Updates about the health of the participants will be obtained from telephone follow-ups every six months and physical check-ups every three years. The study is expected to last for at least 10 years.

Kameshwar Prasad, principal investigator of the study and head of the department of neurology at the All India Institute of Medical Sciences, said that India faced a dual burden of communicable (38%) and non-communicable diseases (62%). Prasad told reporters, "Risk factors only explain 50% of the cases in stroke. Factors, such as vegetarianism, which are unique to India, need to be studied." He remarked that the study was the first of its size in India.

Jaipal Reddy, the minister of science and technology, said at last week's project launch that emerging evidence showed that Indians were more susceptible to stroke than their Western counterparts. "Higher incidence calls for genetic and epidemiological studies to study risk factors and devise preventive strategies," he said.

Prasad stated that the Indian-Dutch study was inspired by two landmark cohort studies: the Framingham Heart Study (United States) and the Rotterdam Study (Netherlands).

Researchers from India will travel to Rotterdam to gain technical expertise from their counterparts at Erasmus MC, who have been engaged in the Rotterdam Study since 1990. This study looks at cardiovascular, endocrine, hepatic, neurological, ophthalmic, psychiatric, dermatological, oncological, and respiratory diseases in a cohort of 8000 people aged 45 or over.

Gabriel P Krestin, chairman of the department of radiology at Erasmus MC, told the *BMJ*, "We will be happy to provide our knowledge and experience gained in the Rotterdam Study with the intended population study at [the All India Institute of Medical Sciences]. Sharing protocols will allow us to pool all the data and obtain comparisons between populations of different ethnicity, and to produce even more meaningful results due to the larger numbers of participants."

K Vijayraghawan, secretary at India's Department of Biotechnology, said that the cohort study was a platform to strengthen bilateral ties between the two countries.

1 Mohan V. India, Netherlands join hands to identify factors behind stroke and dementia. *Times of India* 30 Jan 2014. http://articles.timesofindia.indiatimes.com/2014-01-30/india/46827416_1_all-india-institute-aiims-premier-health-institute.

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