New global centre launched to address chronic diseases

A new international health research partnership plans to tackle chronic diseases ranging from diabetes to dementia in an integrated way. Dinesh C Sharma reports from New Delhi.

The Centre for Control of Chronic Conditions (CCCC), launched in New Delhi, India, on April 7, brings together experts from four leading institutes in Europe, America, and Asia—Emory University, London School of Hygiene & Tropical Medicine (LSHTM), the All India Institute of Medical Sciences (AIIMS), and the Public Health Foundation of India (PHFI)—to increase collaboration in research into non-communicable diseases.

The CCCC, which will have its secretariat at PHFI, will act as a research platform for clinicians, public health experts, geneticists, biochemists, and social scientists from these institutes. The goal is to generate evidence-based knowledge and solutions to address chronic conditions in India and beyond from a policy and clinical perspective.

Chronic conditions are the leading cause of death in India, accounting for more than 5 million deaths each year. They are also a leading cause of disability. "It is not simply a matter of individual lifestyle choices or a health system issue, but relates to broader societal factors, economic development, and physical environments people live in. That's why health professionals need to work with experts from diverse fields to build evidence and find solutions", explained Dorairaj Prabhakaran, vice president of PHFI.

The advantage of this centre is that investigators from individual institutions can take leadership in different areas, pointed out Mahesh C Misra, director of AIIMS. For example, AIIMS, with its clinical medicine structure can provide leadership in designing and testing management strategies such as the use of mobile phones for more efficient health system deployment, said Misra. India faces a serious shortage of specialists for individual chronic ailments. Additionally, individuals often have multiple chronic conditions that might affect several individuals in the same family. One of the projects of CCCC is to study the feasibility of training health workers in the management of chronic conditions so that specialists can be engaged in other crucial tasks. "India has the opportunity to avoid many of

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the problems of chronic disease management in the west. It needs to develop interventions which address risk factors, and prioritise prevention and community and primary care based interventions focused on meeting the health needs of families rather than treating single diseases. This is the only way to ensure that all Indians are able to benefit, and to avoid an over-medicalised, single disease approach", noted Anne Mills, deputy director, LSHTM.

Although the partnership is primarily focused on India, leaders of participating institutions see benefits flowing across the world. "Globalisation of science is a very important agenda of this centre", explained K M Venkat Narayan, professor of global health at Emory University. In addition to translating existing knowledge into policy and action, he said, the centre has a huge opportunity to uncover new causes of diseases, which could lead to development of low cost technologies for diagnostics and therapeutics.

Vikram Patel, Wellcome Trust Senior Research Fellow at LSHTM and PHFI, is already engaged in a project on mental and neurological disorders and cardiovascular diseases. "We are trying to find out why mental illness and cardiovascular diseases occur together and if there is a common mechanism. For instance, if someone in the family has had a stroke, it is likely that care givers may develop depression. We also know that depression affects outcome in diabetes. There could be nutritionrelated problems for family members of someone with a drinking problem because of food scarcity in the family. So we need to develop interventions for people to deal with multiple morbidities. Though we are working in India, this work will have global significance", said Patel. The group is also developing a mobile app for community health workers to integrate management of diabetes, hypertension, alcohol misuse, and depression.

A large community-based cohort of 100 000 adults will be the main research resource available to the new centre. It includes people in two large cities (New Delhi and Chennai), two mid-sized cities (Visakhapatnam and Sonipat), and a set of villages in Himachal Pradesh. "The idea is to follow-up this cohort to study risk factors, evaluate dietary and environmental factors, and evaluate causes of diseases, including cancers over a period of time. In the USA, 60% of the population is categorised either overweight or obese, yet diabetes occurs in just 9%. In India, obesity is 10% but diabetes occurs in 16% people. There must be other causes, which only long-term follow up of large cohorts can reveal", said Prabhakaran.

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