

Experts suggest population-based screening for diabetes, hypertension in India

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Early detection and treatment of diabetes and hypertension through widespread screening is a potential strategy to reduce the substantial lifetime health and cost burdens associated with these illnesses in India



India faces a high burden of diabetes and hypertension. Currently, there is a dearth of economic evidence about screening programmes, affected age groups, and frequency of screening for these diseases in Indian settings.

A study, funded by Department of Health Research, Government of India, has assessed the cost effectiveness of populationbased screening for diabetes and hypertension compared with current practice in India for different scenarios, according to type of screening test, population age group, and pattern of healthcare use.

A meta-analysis was done to assess the effectiveness of population-based screening. Primary data were collected from two Indian states (Haryana and Tamil Nadu) to assess the cost of screening.

The incremental cost per quality-adjusted life-year (QALY) gained across various strategies for population-based screening for diabetes and hypertension ranged from \$0.02 million to \$0.03 million. At the current pattern of health services use, none of the screening strategies of annual screening, screening every 3 years, and screening every 5 years was found to be cost-effective at a threshold of 1-time per capita gross domestic product in India.

"If the share of treatment for patients with newly diagnosed uncomplicated diabetes or hypertension at health and wellness centres increases to 70%, from the existing 4% at subcentres and primary health centres, annual population-based screening becomes a cost saving strategy", said Gunjeet Kaur, Department of Community Medicine and School of Public Health, Post Graduate Institute of Medical Education and Research, Chandigarh.

According to the researchers, population-based screening for diabetes and hypertension in India could potentially reduce time to diagnosis and treatment and be cost-effective if it is linked to comprehensive primary health care through health and wellness centres for provision of treatment to patients who screen positive.

Adding his perspective on the need for a national policy to address the growing burden of diabetes, Dr Parag Shah, Endocrinologist, Gujarat Endocrine Centre said, "Unfortunately, out of the total number of diabetic populations 70% of cases occur in low- and middle- social income countries (LMIC) which results in consumption of high-calorie foods as well as

decreasing physical activity. Keeping this global scenario in mind and particularly for India, it is very essential that we have a national policy such as public and healthcare provider education programs. There is an urgent need to translate the prevention initiatives into the policies to detect the individuals at risk and allow them access to the proper lifestyle either through counseling or through the structured lifestyle intervention programs. This is particularly essential because once individuals develop diabetes especially type 2 diabetes it is very difficult for a country like India to have the huge burden of diabetes which would take a huge tear on our health resources."

Dr Manbeena Chawla

(manbeena.chawla@mmactiv.com)