April 15-17, 2013 Hilton Chicago/Northbrook, USA

Is cardiovascular disease rising in India? A literature survey

Chengappa K Uthappa, Suneedh Manthri and Ramesh Allam

A major shift is taking place in the worldwide burden of cardiovascular diseases (CVD); this 'transition' includes the emergence of Stroke, Coronary Heart Disease (CHD) and Peripheral Artery Disease (PAD) in developing economies. The aim of this study was to investigate whether CVD (Stroke, CHD and PAD) is rising in India and to assess the quality of evidence. We undertook a literature review to obtain measures of disease frequency and mortality related to Stroke, CHD and PAD. A thorough search was carried out on all major databases using standard search terms and strategies. Additional published and unpublished studies were identified from Science Citation Index and various internet sources. Forty-Five studies meeting the inclusion criteria were reviewed. These studies assessed the prevalence, incidence and mortality of Stroke (n=13), CHD (n=29) and PAD (n=3) in India. Crude prevalence and annual incidence of stroke ranged between 0.04%-0.84% and 36/100,000-145/100,000 respectively. The 30-day case fatality rate of stroke ranged between 18%-41%, and was higher in urban than the rural areas. CHD mortality rates ranged between 59/100,000-264/100,000. PAD was studied only in diabetic population in which the prevalence increased with increase in age and duration of diabetes. Although India may be on the brink of an explosive epidemic of CVDs, the evidence supporting these claims is weak. Many studies did not fulfill basic requirements for epidemiological research and were in or around Delhi. Thus, there is an urgent need for new epidemiological research in India comparing wider regions and larger populations.

Biography

Chengappa has completed his MPH from the University of Edinburgh. He is currently working as a Technical Consultant-Operation Research in the DAPCU National Resource Team (DNRT) supporting the National AIDS Control Organization (NACO) for the DAPCU program. His research experience covers a wide range of subjects, largely Infectious Disease (HIV), and Non-communicable Disease.

chengappaku84@gmail.com