

Executive Summary

This report includes data of 2018-2019 from the network of five population-based stroke registries (Cuttack, Cachar, Tirunelveli, Kota and Varanasi) under the National Stroke Registry Programme (NSRP). The objective of this report is to provide comparable data on incidence of stroke in different regions of the country. It describes the burden and stroke mortality in these areas so as to provide baseline evidence for planning of stroke prevention and its control.

The report is organised into two sections. Section I contains Chapters 1 to 5 and Section II contains Chapters 6 and 7.

Chapter 1 describes the population distribution, and measurement of stroke incidence in the five population-based stroke registries. Crude incidence rate represents the actual burden of first-ever stroke in a population and age standardised incidence rate allows for valid comparisons between age groups in different populations. The crude incidence rate in five registries ranged from 96.6 to 187.6 per year per 100,000 population. The age standardised rates (adjusted using world standard population) ranged from 81.9 to 127.7 per year per 100,000 population.

Chapter 2 presents the incidence rates by type of stroke – ischemic stroke, haemorrhagic stroke (intracerebral and subarachnoid haemorrhage), and undetermined stroke. The predominant type of stroke in all the five registries was ischemic stroke (range 46.5% to 84.8%) among all stroke subtypes.

Chapter 3 describes the distribution of few risk factors in first-ever registered stroke cases in the five population-based stroke registries. Risk factors - hypertension (range 40.3% to 75%), current tobacco use (range 19.3% to 62.4%) and diabetes (range 15.9% to 35.1%) have been reported.

Chapter 4 explains the basis of diagnosis of registered stroke cases, method of follow up and vital status at day 28 after onset of stroke. Majority of the registered cases (range 72.7% to 99.6%) had CT scan or MRI or both imaging done. Follow-up information was collected through telephone (range 59.2% to 93%), hospital visit (range 1.5% to 18.9%) and home visit (range 0.2% to 20.1%). Proportion of cases who were alive on day 28 after onset of stroke ranged from 47.9% to 87.8% in the registries.

Chapter 5 explains the stroke mortality in the five population-based stroke registries. Crude case fatality rate ranged from 15.3 to 46.6 per 100,000 population, and age standardised case fatality rate ranged from 13 to 35.5 per 100,000 population.

Chapter 6 describes the measures of data quality and indices of reliability. Data quality is based on its accuracy, completeness, consistency and reliability. The methods include range and consistency checks, verification of residence with pin code, quality checks regarding missing data, duplicate checks, incidence mortality matching and proportion of cases categorized as 'Death Certificate Only' (DCO) in each registry.

Chapter 7 provides a snapshot of each of the registries with information on the institution coordinating the PBSR, population, areas covered, and sources of registration (SOR) providing data for the respective PBSRs.