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Stroke registry: a developing country's perspective.

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Stroke registry: a developing country’s perspective

Stroke has become the leading cause of disability and will be the leading cause of death by the end of 2020 (1). In South Asian countries, there has been a rapid increase in stroke mortality and prevalence of hypertension (2). Influenced by other stroke registries of the world (3, 4), we started a stroke registry in 2004 to record the type and severity of stroke, risk factor patterns and the functional outcome in patients with stroke. We did a prospective observational study, conducted from 2004 to 2007 in the Department of Neurology, Liaquat National Hospital. All patients admitted with the clinical features of stroke were enrolled. Diagnosis was confirmed on CT/MRI findings. A standard questionnaire was completed for every patient by interviewing the patient and or attendant/relative. A total of 500 patients were enrolled. Out of these, 296 (59.2%) were males and 204 (40.8%) were females. Mean age of male was 58.8 ± 12.3 years and female was 60.0 ± 13.2 years, with a significant proportion of patients in young age group i.e. 16.4%. Hypertension was present in 401 (80.2%) patients, 189 (37.8%) were diabetic, 147 (29.4%) had ischaemic heart disease, 332 (66.4%) were dyslipidaemic and 118 (23.6%) were smokers. Majority of the patients 369 (73.8%) had ischaemic while 131 (26.2%) had intracerebral haemorrhage. Out of ischaemic stroke, 53 (10.6%) had large vessel disease (LVD), 46 (9.2%) had cardioembolic (CE), 182 (36.4%) had small vessel disease, 57 (11.4%) had undetermined and 31 (6.2%) had other type of stroke according to the TOAST classification (5). Significant extracranial stenosis was present in 24 (10.7%) patients, while intracranial stenosis was observed in 56 (18.4%) patients. On admission, nearly half of the patients (50%) were totally bed bound with GOS of 2, 3 and mRS of 5 (54.8%) while at the time of discharge 68% were independent with GOS of 4, 5 and mRS up to 3. Hypertension, diabetes, dyslipidaemia and smoking are the most prevalent modifiable risk factors in our cohort. Hospital-based stroke registries serve as a data bank that helps in providing a method for establishing a valuable clinical research data resource (see Fig. 1).

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References

Fig. 1 Varied aspects of stroke identified by stroke registry.