

Survivability of patients admitted for stroke in a general healthcare facility

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ABSTRACT

Introduction: Accurate identification and routine preventive practices are crucial steps in lessening the incidence of mortality among patients with stroke. **Methods:** A retrospective study was conducted among patients who were admitted for stroke at Hospital Seberang Jaya which is a stroke centre in the state of Penang. Data collected included demographic characteristics, physical examination results, comorbid conditions, laboratory tests, and medications prescribed. **Results:** Major drug classes that were prescribed for stroke patients were anti-platelets (86.7%), statins (84.4%), and protein pump inhibitors (75.6%). Stroke category ($p<0.001$) and duration of hospitalization ($p=0.009$) were significantly associated with the survivability of the patients admitted for stroke. Highest percentage of mortality based on categories were ≤ 61 years (13.7%), male (13.2%), Chinese ethnicity (15.6%), non-smoking (16.8%), experienced ischemic stroke (56.0%), with ≥ 3 comorbidities (19.2%), with the uptake of ≥ 11 medications (18.3%) and duration of hospitalization of ≥ 4 days (31.3%). Overall survivability using Kaplan-Meier analysis reported a significant difference of 10-day survival rate between stroke patients with ischemic stroke and haemorrhagic stroke ($p<0.001$). The 10-day survival rates of patients with ischemic stroke and haemorrhagic stroke were 53.5%, and 26.5% respectively. Similarly, Cox regression analysis revealed that the stroke category was the only factor that significantly contributed to mortality post-stroke. Stroke patients who experienced haemorrhagic stroke had a 6.60 higher mortality risk compared with those who experienced ischemic stroke. **Conclusion:** Type of stroke was the significant risk factor for mortality among patients with stroke. Clinician engagement, intensive resources, and regular monitoring are needed for enhancing care for stroke patients.