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A Prospective Study of Drug Utilization Pattern for Stroke Among General Medicine Ward

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ABSTRACT

Background:

Stroke remains one of the leading causes of death globally, with a significant prevalence among elderly individuals. The impact of stroke extends beyond mortality, profoundly affecting the quality of life for patients and placing considerable strain on healthcare systems and society as a whole. Consequently, evaluating the pharmacoeconomic aspects of stroke management is crucial for effective treatment strategies and resource allocation.

Objective:

The study is to determine the symptoms, risk factors, and prescription patterns in stroke patients.
The degree of disability in stroke patients using a modified Rankin scale (mRS)

Methods:

Conducted over six months in the inpatient department, the prospective observational study involved 120 stroke patients aged ≥18 years, diagnosed via CT/MRI after obtaining ethical approval.

Results:

The findings revealed a predominance of male patients (60.83%) with a majority in the 51–60 year age group (25%), followed by those aged 41–50 years (24.16%). A significant portion of the study was both alcoholics and smokers (30.83%), with alcoholism being the most prevalent social habit. Hypertension emerged as the most common comorbidity (55%), followed by diabetes mellitus (35.83%) and coronary artery disease (10%). Ischemic strokes accounted for 95% of cases, compared to 5% for hemorrhagic strokes. The primary presenting symptom was slurred speech (75%), followed by right-side hemiplegia (40%) and left-side hemiplegia (25%). On the modified Rankin Scale, 61 patients had a score of 3, while 31 had a score of 1. By day 30, 35 patients improved to a score of 0. Drug utilization analysis of 633 prescriptions revealed that antiplatelet agents (20.06%) were the most frequently used, followed by antihypertensives (17.37%) and HMG-CoA reductase inhibitors (16.27%).

Conclusion:

Early diagnosis, lifestyle modifications, and combined drug therapies can mitigate complications and enhance patient outcomes. Addressing risk factors like hypertension, diabetes, smoking, and alcohol use is essential in reducing the stroke burden.

Keywords: stroke, modified Rankin scale (mRS), ischemic stroke, prescription pattern, risk factor, symptoms.