**Identification of Drug-related Problems Associated with Stroke Management: A Hospital- based Observational Study**

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**Aims**. The study aimed to identify the drug-related problems (DRPs) in patients diagnosed with stroke.

**Methods.** A single-center, hospital-based, prospective, observational study was carried out in the Departments of

Mahavir Trauma Hospital for 6 months. Patients aged above 18 years, irrespective of any gender and diagnosed with

both hemorrhagic & ischemic stroke were enrolled in the study. We followed them up till discharge.

**Results**. A total of 105 patients [78(74.28%)], males; 27(25.71%), females] were studied. The study population aged

41-70 years [53(50.47%)] were highly prevalent of stroke. The majority of the patients were diagnosed with ischemic

stroke [66(62.85%)], followed by diagnosed with hemorrhagic stroke [39(37.14%)]. Of them, [14(13.33%)] patients had

a history of stroke. Among them, 16 patients were measured with homocysteine level where [4(25%)] patients had a

high level of homocysteine. A total of 91 different medications were used amongst patients, where most commonly

prescribed medications include Levetiracetam [63(60.00%)], Cephalosporins [57(54.52%)], Aspirin [46(43.80%)],

Enoxaparin [45(42.85%)], Labetalol [24(22.85%)] and Mannitol [37(35.23%)]. A total of 80 DRPs were found in patients

which includes omission of therapeutic monitoring [18(17.14%)], followed by, administration error [16(15.23%)], drug-

drug interactions [15(14.28%)], dispensing error [12(11.42%)], prescription error [10(9.52%)], adverse drug reactions

[7(6.66%)], drug-food interactions [1(0.95%)] and omission error [1(0.95%)]. The most commonly observed ADRs were

Mannitol induced hypotension and dry mouth. The survival rate of study participants was 72%.

**Conclusion**. This study helped to identify the rate and patterns of DRPs affecting the clinical outcomes of patients

diagnosed with different clinical sub-types of strokes. It is believed that early detection of DRPs may improve the

therapeutic outcome and survival rate of the stroke patients.