

#### Service Priorities and Programmes

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# Impacts of pharmacists in a multidisciplinary stroke team on drug-related problems - a pilot study

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## **Introduction**

Drug-related problems (DRPs) are common among hospitalized patients, resulting in morbidity and mortality. Overseas studies demonstrated that clinical pharmacists in a stroke team can help to identify and resolve drug-related problems. However, local studies investigating the impacts of pharmacists in a stroke team are limited.

#### **Objectives**

The primary objective of this study was to describe the drug-related problems identified by clinical pharmacist in a stroke team using Pharmaceutical Care Network Europe Foundation (PCNE) Classification for Drug Related Problems V5.01. The secondary outcomes were to evaluate the impacts of pharmacists on length of stay and 28-day readmission rate of stroke patients.

## **Methodology**

A 16-weeks prospective pilot study was conducted in the acute stroke unit (ASU) of Caritas Medical Centre. Patients admitted to the unit from October 2012 to January 2013 were recruited. Clinical pharmacists performed medication reconciliations on admission, reviewed drug therapy and participated in ward round during patients' hospital stay, and provided drug education to patients on discharge. Counseling on anticoagulant therapy was also provided if indicated.

## <u>Result</u>

One hundred forty subjects were recruited. Seventy eight drug-related problems were identified among 58 subjects, resulting in an incidence rate of 41.4%. The mean number of DRPs identified was 0.56 per patients. The majority of DRPs was categorized as drug choice problems (43.5%) under PCNE classification. Drug use

process (28%) and information (28%) were the major causes of DRPs. Physician acceptance rate of pharmacist interventions was 84%. However, no significant reductions in terms of length of hospital stay and 28-days readmission rate were found among the subjects when compared to historical control. To conclude, clinical pharmacists in a multidisciplinary stroke team can help to identify and resolve drug related problems, but their effects on clinical outcomes of stroke patients require further investigations.