UNIVERSITI TEKNOLOGI MARA

EVALUATION OF POTENTIALLY INAPPROPRIATE CARDIOVASCULAR MEDICATION USE AS DETERMINED BY THE STOPP CRITERIA AMONG ELDERLY INPATIENTS ADMITTED IN HOSPITAL SELAYANG

NUR ASYIKIN RUSLI

FACULTY OF PHARMACY
UNIVERSITI TEKNOLOGI MARA (UiTM)

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APPROVAL SHEET

I hereby recommend that the thesis prepared under my supervision by Nur Asyikin Binti Rusli (2008411062) entitled 'Evaluation of Potentially Inappropriate Cardiovascular Medication Use Determined by STOPP Criteria Among Elderly Inpatients Admitted in Hospital be accepted in partial fulfillment of the requirement for the degree of Bachelor of Pharmacy (Hons), from the Faculty of Pharmacy, UiTM.

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Date Mr Mohd Shahezwan Abd Wahab

Main Supervisor

……. …….

Date Prof. Dr. Aishah Adam

Dean of Faculty of Pharmacy

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ABSTRACT

Population aging is pervasive. It is estimated that in 2010 the percentage of elderly population is around 7% and this percentage is expected to increase to 10% in 2020. A high proportion of this population is having cardiovascular diseases and therefore is frequent users of cardiovascular medications. Due to age-related physiological changes, the elderly react differently to medications as compared to younger patients. Changes in the pharmacokinetics and pharmacodynamics of drugs among the elderly predispose them to ADR. This study aims to detect the prevalence of potentially inappropriate cardiovascular medications (PICM) among a group of elderly patients admitted into a government hospital and to identify the most frequent PICM use among them by using the Screening Tool of Older Patient's Prescriptions (STOPP). Medications records of 143 elderly patients of ≥ 65 years were prospectively studied to determine the prevalence and the frequency of PICM among them. The total amount of medications evaluated was 815; mean number of medications per patient was 5.7 ± 3.3. Overall the STOPP criteria detected 43 PICMs in 26.6% of patients. The most frequent encountered PICM was calcium channel blocker with chronic constipation (17.5%), aspirin, clopidogrel, dipyridamole or warfarin with concurrent bleeding disorders (5.6%) and loop diuretics for dependent ankle edema with no clinical sign of heart failure (2.8%). PICM use is highly preventable. Measures to reduce PICM use among elderly patients should be undertaken by the pharmacists and physicians. The applicability and utility of the STOPP criteria at local government hospitals should be studied further.