UNIVERSITI TEKNOLOGI MARA

## EVALUATION OF POTENTIALLY PRESCRIBING OMISSION AMONG THE ELDERLY ADMITTED AT SULTAN ABDUL HALIM HOSPITAL BY USING THE START CRITERIA

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#### **APPROVAL SHEET**

I hereby recommend that the thesis prepared under my supervision by Adilah binti Abdul Basit entitled Evaluation of Potentially Prescribing Omission among the Elderly admitted at Sultan Abdul Halim Hospital by using the START Criteria be accepted in partial fulfillment of the requirements for the degree of Bachelor of Pharmacy from the Faculty of Pharmacy, UiTM.

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#### ABSTRACT

The proportion of the elderly individuals is increasing dramatically. It is expected in 2020 the percentage of elderly population in Malaysia would be 9.9 percent. The elderly are more prone to have multiple co-morbidities due deterioration in organ and body functions. Therefore they require regular prescriptions of medications for treatment or for primary and secondary prevention of diseases to prolong life and improve quality of life. Nevertheless studies have shown that medication underuse have been common. Percentage of potential prescribing (PPOs) range from 22.7% -57.8%. PPOs have been deemed as potential inappropriate prescribing and are highly preventable. Having a protocol or a screening tool to filter potentially inappropriate medications could increase the appropriateness of a drug regimen. This study is aimed to detect PPOs among a group of elderly inpatients in Hospital Sultan Abdul Halim and to identify factors affecting PPOs occurrence. 128 medication records were included in this study. The "Screening Tools to Alert Doctors to the Right Treatment" (START) criteria were used to identify PPOs. Overall 54 elderly patients did not received medications as listed in the START criteria. The most prevalent PPOs was Aspirin or clopidogrel with a documented history of atherosclerotic coronary, cerebral or peripheral vascular disease in patients with sinus rhythm, followed by Angiotensin converting enzyme (ACE) inhibitor with chronic heart failure and Metformin with type 2 diabetes metabolic syndrome (in the absence of renal impairment).PPO is not correlated with age, gender and number of medications. The START criteria could be used as a screening tool to alert the physicians to the right treatment. Further study to evaluate its use and applicability in Malaysian hospital settings should be undertaken.