UNIVERSITI TEKNOLOGI MARA

EVALUATION OF DRUG RELATED PROBLEMS IN HOSPITALIZED ACUTE CORONARY SYNDROME PATIENTS

KUAPIH @ FLORINA BINTI KIMJUN
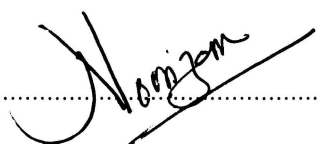
Dissertation submitted in partial fulfilment

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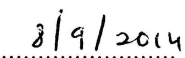**Master in Clinical Pharmacy**

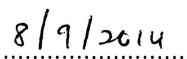**Faculty of Pharmacy**

June 2014

APPROVAL SHEET

I hereby recommend that the dissertation prepared under my supervision by Kuapih @ Florina Binti Kimjun entitled "Evaluation of drug related problems in hospitalized acute coronary syndrome patients" be accepted in partial fulfillment of the requirements for Master in Clinical Pharmacy from Faculty of Pharmacy, UiTM.

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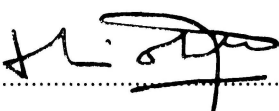(Professor Dr Noorizan binti Abd Aziz)   Date
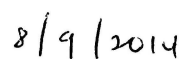
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AUTHOR'S DECLARATION

I declare that the work in this dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledge as referenced work. This dissertation has not been submitted to any other academic institution or non-academic institution for any degree of qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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ABSTRACT

Acute coronary syndrome (ACS) patients often receive multiple medications during their hospitalization and this can lead to occurrence of drug-related problems (DRPs). They are normally presented together with other co-morbidities such as dyslipidemia, hypertension and diabetes that complicate more and have an influence on their drug choices during hospitalization. Therefore, this study is expected to give initial information on the type of DRPs and predictors of having DRPs during the episode of ACS patient hospitalization. **Objective:** To describe types and causes of DRPs in hospitalized acute coronary syndrome in Hospital Labuan. Factors associated with DRPs are determined and either DRPs have any impact on patient outcome in term of mortality. **Method:** A retrospective observational cohort study was conducted on 124 patients that were admitted to ward for diagnosis of either unstable angina, NSTEMI or STEMI. PCNE classification was used to categorize any drug related problems and its causes. Multiple logistic regressions analysis was performed to identify significant predictors of having DRPs from patient's characteristics. **Results:** An average of 1.38 ± 0.993 of DRPs per patient can be determined. About 78% of total subjects had at least one DRP. Highest number of DRPs were encountered under "treatment effectiveness" category (80.7%), followed by "adverse reactions" (12.3%) and "treatment costs" (7%). Length of hospital stay was the only significant predictor of having DRPs among the subjects (OR = 1.35; $p = 0.045$). No death was documented, thus DRPs impact on mortality cannot be identified. **Conclusion:** Small sample size and variability in the study design contribute to the inconsistency of the study findings from other DRPs studies carried out elsewhere.

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