## **UNIVERSITI TEKNOLOGI MARA**

# ADVERSE DRUG REACTIONS OF ANTI-TUBERCULOSIS DRUGS AMONG TUBERCULOSIS PATIENTS TREATED IN HOSPITAL SG. BULOH

#### **NURNIZA BT NISBAR**

Dissertation submitted in partial fulfilment of the requirements for the degree of 
Master of Clinical Pharmacy

**Faculty of Pharmacy** 

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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 acknowledged as referenced work. This writing has

not been submitted to any other academic institution or non-academic institution for

any degree or 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.

Name : Nurniza Bt Nisbar

Student ID : 2014202896

Department : Clinical Pharmacy

Faculty: Pharmacy

Dissertation : Adverse Drug Reactions of Anti-Tuberculosis Drugs Among

Tuberculosis Patients Treated in Hospital Sg. Buloh

Signature :

Date : January 2016

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#### **ABSTRACT**

AIM: To analyse and assess common types of ADRs induced by anti-TB drugs in the study population by studying the adverse drug reactions, common ADRs, common drugs accounting for ADRs, systems involvement, causality and severity. In addition to identifying the risk factors and predictors associated with ADRs induced by anti-TB drugs in the study population, it is also to observe the management of the ADRs in the study population. METHODS: A retrospective observational record review study performed in Hospital Sg. Buloh, Selangor. 160 clinically diagnosed TB in-patients and/or out-patients who visited the Infectious Disease Unit in Hospital Sg. Buloh who received the anti- tuberculosis regimen according to the protocol for TB treatment were included. Patient's data were accessed retrospectively through electronic medical records. Descriptive data were analysed using frequency and percentage. Simple logistic regression was used for univariate analyses. Factors with significant p value were analysed using multiple logistic regression. RESULTS: A third of patients experienced ADR with half of the sample experiencing ADRs in short period of time (within the first 14 days). Half of our sample subjects had a "possible" causal reactions whereby two thirds of those suffering from an ADR had a severe reaction. Seven factors were identified as possible predictors which include age of between 41 to 50 years (p = .041), 51 to 60 years (p = .101), female gender (p = .234), Malay ethnicity (p = .242), drug allergy (p = .225), pulmonary-TB (p = .160), intensive phase regime with HREZ (p = .027) and maintenance phase regime with HR (p = .020). Final analysis with multiple logistic regression however shown factors included were not significantly associated with ADRs. CONCLUSION: The data obtained from this study has helped to uncover the statistical characteristics and estimate the burden in dealing with ADRs with anti-TB in Hospital Sg. Buloh. The possible risk factors that contributed to adverse drug reactions with anti-TB drugs in our sample were identified and therefore would facilitate physicians to screen and make prompt diagnosis of these ADRs, provide early management and counselling which will improve the outcomes of TB treatment.

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