

**UNIVERSITI TEKNOLOGI MARA**

**COGNITIVE IMPAIRMENT IN  
ELDERLY TYPE II DIABETES  
MELLITUS AND ITS ASSOCIATED  
RISK FACTORS**

**DR. ROSNADIA BINTI SUAIN BON**

**MMED**

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## **AUTHOR'S DECLARATION**

I declare that the work in this thesis/dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis 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 of Student : Dr Rosnadia Suain Bon

Student I.D. No : 2011184113

Programme : Master of Science

Faculty : Medicine

Dissertation Title : Cognitive Impairment In Elderly Type II Diabetes  
Mellitus and Its Associated Risk Factors

Signature of Student : .....

Date : October 2017

## ABSTRACT

Cognitive impairment is common and may be part of normal ageing and may act as a precursor to dementia. There are several modifiable risk factors such as diabetes, dyslipidaemia and obesity which can promote the progression of dementia. This study aims to determine the prevalence of cognitive impairment and its associated factors and specific psychiatry disorders among elderly Type II Diabetes Mellitus patients in Hospital Kuala Lumpur. This is a cross sectional study involving 113 older adults more than 60 years old diagnosed as type II Diabetes Mellitus attending specialist physician clinic in Hospital Kuala Lumpur. The participants were recruited through universal sampling. Screening tools included demographic questionnaires, Montreal Cognitive Assessment-Malay ( MoCA), Depression Anxiety Stress Scale - Malay( DASS ) and MINI International Neuropsychiatry Interview - Malay ( M.I.N.I). The cut-off score for MoCA was taken as 22/23 for cognitive impairment. Descriptive analysis was performed and followed by multiple logistic regression. The prevalence of cognitive impairment was 46.9%. The prevalence for major depression and anxiety disorders were 10.6% and 2.7% respectively. Factors that were found to be significantly associated with cognitive impairment were Indian & Punjabi ethnicities (OR = 4.896, CI= 1.570-15.271), secondary education level ( OR = 0.343; CI = 0.122-0.962) and tertiary education level (OR = 0.045; CI = 0.008-0.257 ). Cognitive impairment was high among elderly type II diabetes mellitus and it was significantly associated with ethnicity and education level.

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