# **UNIVERSITI TEKNOLOGI MARA**

# VISUAL IMPAIRMENT AMONG ADULTS IN SELECTED URBAN AREA

## NURUL SHAKIRA BINTI MINHAT

Dissertation submitted in partial fulfillment of the

requirements for the

**Bachelor of Optometry (Hons)** 

**Faculty of Health Science** 

July 2015

### **AUTHOR'S DECLARATION**

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

In the event that my dissertation be found to violate the conditions mentioned above, I voluntarily waive the right of conferment of my degree and agree be subjected to the disciplinary rules and regulations of Universiti Teknologi MARA.

Name of Candidate	:	Nurul Shakira Binti Minhat			
Candidate I.D.No.	:	2011891988			
Programme	:	Bachelor of Optometry (Hons)			
Faculty	:	Health Sciences			
Thesis Title	:	Visual Impairment Among Adults in Selected Urban Area			
Signature of Candidate :					
Date		: July 2015			

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### ABSTRACT

#### Visual Impairment Among Adults in Selected Urban Area

**INTRODUCTIONS:** The prevalence of visual impairment and the decline of visual function increased with advancing age and become concern to older populations. Visual impairment also reported to be the leading cause of age-related vision disorder. This study was done to determine the prevalence of self-reported visual impairment among adults in urban area. MATERIALS AND METHODS: A self-reported questionnaire was administrated to 40 eligible residents of Shah Alam, Selangor. The face-to-face interview collected the demographic data included the age, gender, race, marital status, educational level, occupation, and history of fall. Then, the participants rated about their vision based on question given, "How is your eyesight (with glasses or contacts) if you wear them?" either "Excellent", "Good", "Fair", "Poor", or "Unable to see". The visual acuity measurement was done with habitual or correction using LogMAR chart at 6 meters. **RESULTS:** The prevalence of VI among adults in urban populations of Shah Alam was 22.5%. Out of 40, they were 9 individuals reported "Fair" about their vision based on self-reported questionnaire. Female showed higher prevalence than the male. The highest prevalence of VI was reported among the age of 46-50 years old with prevalence of 7.5%. The area under the curve (AUC) of 1.000 in the ROC curve analysis indicated that the self reported was a good method to determine the VI over the visual acuity measurement. There was insignificant and poor association (p>0.05) ( $r<\pm0.30$ ) between the demographic data with the visual impairment. CONCLUSIONS: The self-reported question can be suggested for quick, time-effective and save cost in determination of VI among adults.

**KEYWORDS** : self-reported, visual impairment, urban, adults