UNIVERSITI TEKNOLOGI MARA

AWARENESS AMONG DIABETIC PATIENT ON OCULAR COMPLICATION

NURUL HANANI BINTI NANIP

BACHELOR OF OPTOMETRY (HONS)

JULY 2015

AUTHOR'S DECLARATION

I declare that the work in this dissertation was carried out in accordance with the regulation of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledge as referenced work. This topic has not been submitted to any academic institution or non-academic institution for any degree or qualification. In the event that my desertation be fount to violate the condition mentioned above, I voluntarily waive the right of conferment of my degree and agree be subjected to the disciplinary rules and regulation of Universiti Teknologi MARA.

| Name of Candidate | : | Nurul Hanani Binti Nanip |
|----------------------|-----|--|
| Candidate ID No. | : | 2011273864 |
| Programme | : | Bachelor in Optometry (Hons) |
| Faculty | : | Health Sciences |
| Thesis Title | : | Awareness Among Diabetic Patient On Ocular |
| | | Complication |
| | | |
| | | |
| | | |
| Signature of Candida | ite | : |

July 2015

TABLE OF CONTENTS

| CONTENT | | PAGES |
|-------------|--|-------|
| AUTHOR'S | ii | |
| ACKNOWL | iii | |
| TABLE OF | iv | |
| LIST OF TA | BLES | vii |
| LIST OF FIG | GURES | viii |
| LIST OF AB | BREVIATIONS | ix |
| ABSTRACT | , | X |
| ABSTRAK | xi | |
| | | |
| CHAPTER | 1 INTRODUCTION | 1 |
| 1.1 | Diabetes Mellitus | 1 |
| 1.2 | Prevalence of Diabetes Mellitus | 1 |
| 1.3 | Types of Diabetes | 3 |
| 1.4 | Ocular Complication | 4 |
| 1.5 | Implication of lack of knowledge and awareness | 5 |
| 1.6 | Problem Statement | 6 |
| 1.7 | Study Objectives | 7 |
| | 1.7.1 General Objective | 7 |
| | 1.7.2 Specific Objective | 7 |
| 1.8 | Study Hypothesis | 7 |
| | | |
| CHAPTER | 2 LITERATURE REVIEW | 8 |
| 2.1 | Diabetes Mellitus | 8 |
| | 2.1.1 Types of Diabetes | 8 |

| | | 2.1.2 Prevalence of Diabetes Melitus | 9 | | |
|------|----------------------|---|----|--|--|
| | 2.2 | Awareness on Ocular Complication Due to Diabetes Mellitus | | | |
| | 2.3 | Implication of Lack of Knowledge | 13 | | |
| | | | | | |
| СНАН | PTER 3 | METHODOLOGY | 16 | | |
| | 3.1 | Study Design | 16 | | |
| | 3.2 | Study Location | 16 | | |
| | 3.3 Subject | | | | |
| | | 3.3.1 Inclusion Criteria | 17 | | |
| | | 3.3.2 Exclusion Criteria | 17 | | |
| | 3.4 | Research Instruments | 17 | | |
| | 3.5 | Research Procedures | 18 | | |
| | 3.6 | Ethics Approval | 19 | | |
| | 3.7 | Data Analysis | 19 | | |
| | | | | | |
| СНАН | CHAPTER 4 RESULTS | | 20 | | |
| | 4.1 | Demographic Characteristics | 20 | | |
| | 4.2 | Awareness Of Diabetes Mellitus And Its Complication | 21 | | |
| | 4.3 | Awareness Of Ocular Complication | 21 | | |
| | 4.4 | Appropriate Eye Care Seeking Behaviour | 23 | | |
| | | | | | |
| СНАН | CHAPTER 5 DISCUSSION | | | | |
| | 5.1 | Study Limitation | 30 | | |
| | 5.2 | Study Contribution | 31 | | |

ABSTRACT

Purpose: Diabetes mellitus is a significant cause of visual impairment, hence adequate knowledge on this condition and its ocular complications is of immense importance to diabetic patients. It affects virtually all ocular structures and can lead to blindness. This study was conducted to find out the knowledge and awareness of ocular complications among diabetic patients within Selangor. Methods: Sixty-three subjects were enrolled in this study. After signing the consent form, each of the subjects completed the questionnaires. The first set of questionnaire was set to obtained demographic data and inclusion criteria for the subject. The second set was set to investigate the awareness and knowledge of ocular complication among diabetic patients. Results: Majority of subjects were between 41 years to 50 years of age. Of forty-nine (77.8%) who were aware that eyesight function can be impaired by diabetes, more than half (68.3%) did not know the part of the eye that can be affected. Patient who have been diabetic below 10 years are more aware that diabetes can affect the eye than those with diabetic 10 years and above (63.7% vs 36.3% p = 0.001). Awareness of diabetic complications is better in those with tertiary education than others. *Conclusion:* We conclude that those who have been diabetic for 5-10 years are more aware of ocular complications of diabetes mellitus. This might be due to the sources of knowledge that can be easily accessed through reading in the internet and magazine. However, although the awareness of ocular complication is high, the level of knowledge is low. Health practitioners especially optometrist need to intensify health education through media, regular health talks in clinics to increase knowledge and increase health seeking behaviours of diabetics.

Keywords: Awareness, knowledge, ocular complication, diabetes mellitus, diabetic retinopathy.