UNIVERSITI TEKNOLOGI MARA

QUALITY OF LIFE STUDIES AMONG TYPE 2 DIABETES MELLITUS IN KLANG VALLEY

NURHYDIANA BINTI ABD. RAHIM

Dissertation submitted in partial fulfillment of the requirements for the degree of Bachelor of Pharmacy (Hons.)

Faculty of Pharmacy

November 2009

ACKNOWLEDGEMENT

I would like to thank my supervisor, Associate Professor Dr. Salmiah Mohd. Ali for her guidance in completing this research paper. Thank you for your time, thoughts and information which helped me to complete this paper. I would also like to thank all the pharmacists in the community pharmacies in Shah Alam and Kelana Jaya for letting me distribute the questionnaires in their pharmacies and even willing to help me in distributing the questionnaires. Without their help, I would not have any chance in completing this paper.

Special thanks to my parents, Abd. Rahim Ambak and to my siblings, families, lecturers of Faculty of Pharmacy UiTM and all my friends for their support and help throughout this challenging project.

Finally, to all who have taken part either directly or indirectly in completing this research paper, thank you so much and may God bless all of you.

TABLE OF CONTENTS

| | | Page |
|-----|---|-----------|
| | LE PAGE | |
| | ROVAL | |
| | NOWLEDGEMENT LE OF CONTENTS | ii iii |
| | LE OF CONTENTS OF TABLES | |
| | OF FIGURES | V |
| | OF ABBREVIATIONS | vi vii |
| | TRACT | viii |
| | | V 111 |
| 1.0 | CHAPTER ONE (INTRODUCTION) | |
| 1.1 | Introduction | 1 |
| 1.2 | Problem Statements | 2 |
| 1.3 | Significance of the study | 3 |
| 2.0 | CHAPTER TWO (LITERATURE REVIEW) | |
| 2.1 | Diabetes Mellitus | 4 |
| 2.2 | Classification of Diabetes | 4 |
| 2.3 | Complications of Diabetes | 6 |
| | 2.3.1 Microvascular Complications | 6 |
| | 2.3.2 Macrovascular Complications | 8 |
| 2.4 | Quality of Life and Diabetes | 9 |
| 2.5 | Factors affecting QoL among people with Type 2 DM | 9 |
| 3.0 | CHAPTER THREE (MATERIALS AND METHODS) | |
| 3.1 | Study design | 11 |
| 3.2 | Sample selection | 11 |
| 3.3 | Instrumentation | 11 |
| 3.4 | Data collection procedures | 12 |
| 3.5 | Data analysis | 13 |
| 4.0 | CHAPTER FOUR (RESULTS) | |
| 4.1 | Demographic data | 14 |
| 4.2 | Comparison of general QoL score with demographic information | 23 |
| 4.3 | Comparison between demographic information with the life domain affected by Type 2 DM | 27 |
| 4.4 | Individual weighted impact scores for ADDQoL | 52 |
| 5.0 | CHAPTER FIVE (DISCUSSION) | |
| 5.1 | Discussion | 54 |
| 5.2 | Limitation of the study | 60 |

ABSTRACT

Ouality of Life (OoL) issues of chronic diseases are now receiving increasing attention from researchers. This study aims to determine the QoL of Type 2 Diabetes Mellitus patients in Klang Valley and to compare the OoL according to their sociodemographic information, which will give some insight to health practitioners on OoL-related information in order to improve the OoL of the patients. The data was collected by self-administered questionnaires. The questionnaire consists of two sections which are socio-demographic information and ADDQoL questionnaire. A total of 101 respondents among public completed the survey. The statistical analyses used were descriptive statistics and non-parametric Mann-Whitney and Kruskal-Wallis tests. Generally, the OoL scores of the patients were low as the mean scores ranged from -4.73 to -2.32. The highest score recorded is the way society react life domain which was -2.32 while the lowest score is freedom to eat life domain. It was also found that male patients, age of more than 40 years, not being a Hindu, better educated, employed, higher income, longer duration of disease and did not having any complications reported higher QoL compared to patients who were female, younger, being a Hindu, less educated, unemployed, moderate income, short duration of disease and having complications. This study leads to better understanding of OoL of the Type 2 DM patients. This is important in designing interventions by health practitioners towards Type 2 DM patients to improve the clinical outcome and most importantly the OoL of the patients.

Keywords: quality of life, type 2 diabetes mellitus patients, ADDQoL

CHAPTER 1

INTRODUCTION

1.1 Introduction

According to World Health Organization (WHO) (1999), diabetes mellitus (DM) is a metabolic disorder characterised by chronic hyperglycemia with disturbances of carbohydrate, fat and protein metabolism resulting from defects in insulin secretion, insulin action or both. DM is a complex and serious chronic disease associated with several potentially preventable complications such as cardiovascular disease, nephropathy, neuropathy, amputation and blindness. These complications affect the patients' quality of life (QoL). Whether the patients have the complications or not, the QoL of the patients are affected.

There are many studies done by various researchers to prove this. However, the studies are mostly being performed at Type 1 DM patients (Hopkins *et al.*, 2005). Daily blood glucose monitoring, need for self-injection and concern about long term complications are the main issues in Type 1 DM. In contrast, Type 2 DM is considered less severe and issues of QoL are often being considered for Type 1 DM patients. Nevertheless, QoL of patients with Type 2 DM are also affected by their conditions. They are also aware of their vulnerability to physical complications, as well as being affected by the need for exercise regimens and restriction of diet.