UNIVERSITI TEKNOLOGI MARA (UiTM)

PERCEPTIONS OF DIABETES AMONG PATIENTS AND THEIR UNDERSTANDING ON INSULIN USAGE

ABDUL RAHMAN AIMAN BIN ROSLI

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

Faculty of Pharmacy

2015

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

Page

ABSTRACT

Diabetes is a group of metabolic disorder that is a common problem yet not well understood, affecting population all over the world with its prevalence keep on increasing year by year (NHMS, 2011). Insulin was introduced as one of the treatment of diabetes. However, the effectiveness of the insulin has been compromised due to lack of knowledge and proper education on insulin usage. Hence, this study was conducted in order to describe the perception of diabetes and knowledge on insulin. Besides, the underlying factors that can contribute to improper insulin usage among patients were also be studied. A questionnaire-based survey was done on randomly selected 100 diabetic patients on insulin therapy. Insulin Treatment Satisfaction Questionnaire (ITSQ) and 8-Gate Knowledge Questionnaire were used to identify perception and knowledge on diabetes and insulin. Fisher's Exact Tests were used to investigate the associations between variables. In general, the result shows that most of the respondent still lack of knowledge about the diabetes and insulin usage. From 100 respondents, it was only 27% of them who had the proper education on insulin usage. 59 out of 100 insulin user claimed that they had low satisfaction on blood glucose control by using the insulin. Meanwhile from perception aspect, about 58% admit that the insulin treatment was a slight problem or trouble for them. About 97% respondents claimed that they had experienced hypoglycemic (low blood glucose level) signs and symptoms during the treatment.

CHAPTER 1

INTRODUCTION

1.1:   Introduction

Diabetes mellitus (DM) can be classified as a major public health concern in Malaysia and the mortality rate keep on increasing by year (National Health and Morbidity Survey, NHMS., 2011). The disease is a group of metabolic disorder which primarily characterized by high glucose level in the blood or hyperglycemia due to irregularity in insulin secretion, insulin action or both. Generally, long term hyperglycemia can contribute to long-term damage, dysfunction, and failure of various organs, especially the eyes, kidneys, nerves, heart, and blood vessels (Diabetes Care., Jan 2009). It is common for the diabetic patient having complications such as heart disease, stroke, end-stage renal failure, blindness and amputation. The complications are possibly can be prevented by providing the patient with intensive insulin therapy. However, this treatment is not suitable for all diabetic patients since it may contribute to high risk of hypoglycemia secondary to excessive insulin dosage. Thus, a correct dose adjustment is crucial in order to maintain glucose level in the blood.

Insulin is necessary for normal homeostasis of carbohydrate, protein, and fat metabolism. Basically, people with type 1 diabetes mellitus have an inability to produce enough insulin in order to sustain their life. They depend on the exogenous insulin for survival. Meanwhile, type 2 diabetic patient do not rely on exogenous insulin to sustain their life. However, over time, there are many of type 2 diabetic patients will show reduction in insulin production. Hence, they need to be supplemented with insulin in order to control their blood glucose level adequately, especially when they get stress or ill. So, it is important for diabetic patient to have a proper insulin management in order to combat the disease.