UNIVERSITI TEKNOLOGI MARA

HYPOGLYCEMIA: AWARENESS AND CHALLENGES FACED BY PATIENTS WITH DIABETES

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TABLE OF CONTENT

ACKNOWLEDGEMENT 4

LIST OF TABLES 8

LIST OF ABBREVIATIONS 9

CHAPTER ONE 10

INTRODUCTION 10

1.1 Overview 10

1.2 Problem statement 11

1.3 Rational of study 12

1.4 Objectives 12

CHAPTER TWO 13

LITERATURE REVIEW 13

2.1 Definition of Hypoglycemia 13

2.2 Epidemiology 13

2.2.1 Morbidity and mortality 15

2.3 Classification of Hypoglycemia 16

2.4 Signs and symptoms 17

2.5 Causal factors 19

2.6 Diagnosis 21

2.7 Treatment 22

2.8 Challenges 24

2.8.1 Hypoglycemia unawareness 24

2.8.2 Fear 25

2.8.3 Lack of knowledge 26

CHAPTER ONE

INTRODUCTION

1.1 Overview

One of the most feared complications of diabetes treatment is hypoglycemia. Regrettably, the threat and incidence of hypoglycemia case is increased day by day in efforts to accomplish normal blood glucose level among diabetic patients. Incorrect administration of insulin or anti-diabetic medications, excessive physical activity, skipping a meal or decreased appetite may cause drops in blood glucose level. Low blood glucose level can have an effect on all the organs in the body, especially the brain (McConnell, 2007). There may be barriers in the management of this condition and this could potentially increase the risk on incidence and hence, affect patients' quality of life.

Possibly, hypoglycemia is a severe and deadly complication of diabetes treatment and become a major cause of morbidity as well as mortality (Cryer, 2008). If misdiagnosed, this complication can be life-threatening where it can lead to serious morbidity such as major vascular event like stroke, acute cardiac failure, myocardial ischemia, myocardial infarction and arrhythmias especially among diabetic patients (Frier, 2008). Additionally, based on the study made before, the fear of hypoglycemia could get worse because of strict metabolic control implementation and this issue should need further research for finding a solution (Diabetic Hypoglycemia, 2008).

Other author suggested that, the cause and impact of hypoglycemia unawareness including factors such as psychosocial and self-management should need further research too (Thomas Kubiak, 2006). Furthermore, incidence of severe hypoglycemia in type 2 diabetes patients treated with insulin may be imprecise since many cases are treated by non-emergency medical services like family and friends at home or other than hospitals (Frier, 2008). Henceforth, the threat and inaccurate incidence of hypoglycemia become a major limiting factor for diabetes mellitus glycemic control (Briscoe & Davis, 2006).

1.2 Problem statement

The incidence of hypoglycemia unawareness is rising and frequency of untreated mild to moderate low blood sugar events may progress into severe event of hypoglycemia thus, become a threat. Recent studies also said that patients with Type 2 diabetes may develop hypoglycemia unawareness syndrome as found in the patients with Type 1 diabetes (Stephen Davis, 2004). This statement indicates that diabetic patients are prone to lose awareness towards symptoms of hypoglycemia in some cases and thus become a challenge for them to take care of themselves.

The rising of diabetes prevalence also raises the risk of developing hypoglycemia unawareness. The problem regarding to the diminished of hypoglycemia awareness level among diabetic patients can lead to morbidity and mortality if the matter is not solved.