



NUTRITIONAL STATUS AND FOOD HABIT PATTERN OF DIABETIC PATIENT IN CHATTOGRAM AREA OF BANGLADESH

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Roll no.: 0118/09

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Master of Science in Applied Human Nutrition and Dietetics**

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JUNE- 2020

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This is to certify that we have examined the above master's thesis and have found it complete and satisfactory in all respects and that all revisions required by the thesis examination committee have been made.

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**Dedicated
to my
beloved
parents
and
teachers**

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CONTENTS

CHAPTER	TITLE	PAGE NO
	AUTHORIZATION	ii
	ACKNOWLEDGEMENTS	v
	TABLE OF CONTENT	vi-vii
	LIST OF TABLES	viii
	LIST OF ABBREVIATIONS	ix
	ABSTRACT	x
CHAPTER I	INTRODUCTION	1-4
CHAPTER II	REVIEW OF LITERATURE	5-12
2.1	General Overview of Nutritional Status	5
2.2	Nutrition Education	5
2.3	Energy Deficiency	6
2.4	Energy Requirements and Reference Body Weight	6
2.5	Overview of Diabetes	7
2.6	Prevalence and incidence of diabetes	8
2.7	Anthropometric Measurement	8
2.8	Dietary Methods	9
2.9	Dietary Pattern in Bangladesh	9-10
2.10	Previous studies on nutritional status of diabetic patients	11-12
CHAPTER III	MATERIALS AND METHODS	13-18
3.1	Study Region	13
3.2	Subject Selection	13
3.3	Study Design	13
3.4	Study Population	14
3.5	Inclusion Criteria	14
3.6	Exclusion Criteria	14
3.7	Study Tools	14
3.7.1	Structured Interview Questionnaire	14
3.8	Anthropometric Tools	15
3.8.1	Weight	15

CONTENTS (Contd.)

CHAPTER III	TITLE	PAGE NO
3.8	Anthropometric Tools	15
3.8.1	Weight	15
3.8.2	Height	15
3.8.3	Body Mass Index	15
3.8.4	Ideal Body Weight	15
3.8.5	Blood Test	15
3.9	Data Collection Procedure	16
3.9.1	Administration of the Questionnaire	16
3.9.2	Socio-demographic characteristic	16
3.9.3	Medical history	16
3.9.4	Anthropometric Measurements	16
3.9.5	Dietary Intake	17
3.10	Data Quality Control	17
3.11	Standardization/Calibration of Instruments	17
3.12	Accuracy of Anthropometric Measurements	18
3.13	Minimizing Biases	18
3.14	Data processing and analysis	18
CHAPTER IV	RESULTS	19-26
CHAPTER V	DISCUSSION	27-30
CHAPTER VI	CONCLUSION	31
	REFERENCES	32-40
	APPENDIX	40-45

LIST OF TABLES

TABLE NO.	TITLE	PAGE NO.
2.1	Per capita/d intake of major food items (g)in Bangladesh population, HIES	9
4.1	Distribution of Socio-demographic characteristics of the Respondents	19
4.2	Physical activity and Nutritional status of the respondents	20
4.3	Medical history of the respondents	20
4.4	Mean Blood Glucose level	21
4.5	Food habit pattern and eating behavior of the diabetic patient	22
4.6	Association between nutritional status and socio demographic Conditions	23
4.7	Association between nutritional status and medical history of the Respondents	24
4.8	Association between nutritional status and physical activity	25
4.9	Association between nutritional status and food habit pattern of diabetic patient	25

LIST OF ABBREVIATIONS

ABF	After Breakfast
ADA	American Diabetic Association
BDHS	Bangladesh Demographic and health survey
BBS	Bangladesh Bureau of Statistics
BMI	Body Mass Index
Cm	Centimeter
DH	Diabetes Hospital
DM	Diabetes Mellitus
FAO	Food and Agriculture Organization
HIES	Household Income and Expenditure Survey
IDF	International Diabetes Federation
ML	Milliliter
SPSS	Statistical Package for the Social Science
T1D	Type 1 Diabetes
WHO	World Health Organization

ABSTRACT

The study aimed at determining the nutritional status and food habit pattern among type 2 diabetic patients in the Chattogram area, Bangladesh. Overall, three hundred and seven patients (112 males and 195 females) were participated in this cross-sectional study, receiving treatment from different hospitals in Chattogram. The information was collected by using a pretested, structured questionnaire on the socio-demographic, anthropometric measurement such as body mass index (BMI) as the indices of nutritional status of the participants. Data were analyzed using SPSS statistical package (version 21) and the level of significance was set at $P < 0.05$. From this study it was observed that 44.3% were overweight, 42.0% were normal, 2.6% were underweight and 11.1% were obese. In this study higher age group participants were greatly prone to be diabetic patients as their islet of Langerhans gland's secretion reduced over time. It also revealed that educational qualification and occupation had a significant association with nutritional status. However, the average blood glucose level was higher in both conditions during fasting (Male and female were 188.57 ± 82.971 mg/dl and 151.29 ± 55.686 mg/dl respectively) and after two hours of breakfast (male was 284.26 ± 94.573 mg/dl and female was 221.85 ± 78.219 mg/dl). Among the participants, three-quarters had no association with a family history of diabetes. In terms of the complications from diabetes disease, most of the participants were suffered from hypertension, kidney problem and heart problem which in percentages were 53.1%, 30.0%, and 45.6% respectively. To reduce the severity of the above complications 58.6 % of respondents were adapted to diet and drug therapies while 36.8 % on insulin only. The remaining 4.6% relied on food and lifestyle modification to reduce the complications of diabetes. Physical activity level of the diabetic patient was found to be strongly associated with their nutritional status. There was no significant association of diet, skipping meals, snacks, fast food, and supplementary nutrient on nutritional status. In conclusion, physical activity, education, and occupation factors played a vital role to combat the complications of diabetes and help to maintain the nutritional status of diabetes patients.

Key words: Blood glucose, Nutritional status, Physical activity, Food habit pattern