

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

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Roll no.: 0118/09 Registration no.: 0551 Session: 2018-2019

A thesis submitted in the partial fulfillment of the requirements for the degree of Master of Science in Applied Human Nutrition and Dietetics

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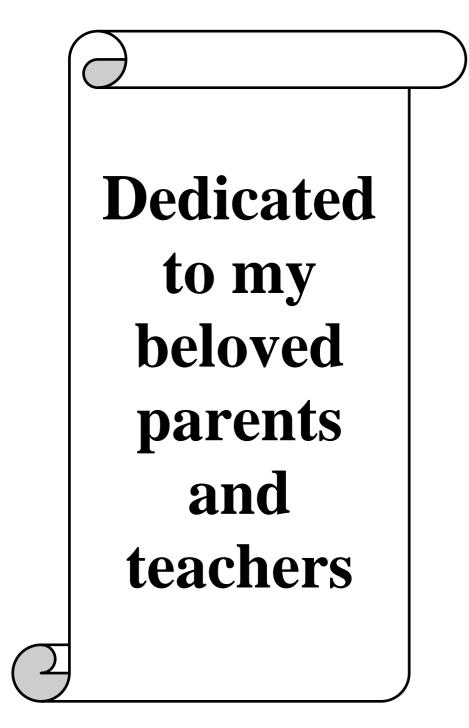
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LIST OF ABBREVIATIONS

| 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