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RESEARCH ARTICLE

A SURVEY ABOUT THE CURRENT SCENARIO OF DIABETES IN CHATTOGRAM AREA BY DETERMINING PRACTICE OF THE SELF-CARE ACTIVITIES AMONGST PEOPLE WITH DIABETES

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Abstract

Background: Diabetes is a non-communicable disease that create the largest involvement to morbidity in addition to mortality worldwide. Aim of present study was to conclude the practice of the self-care activities amongst people with diabetes in addition to a comparative study with current scenario of the diabetes in Chattogram Diabetic General Hospital, Bangladesh.
Methods: This study and data collection was performed into two ways. Firstly, review literatures to evaluate self-care activities of diabetic patients. After that, preparation of the survey on self-care activities of diabetic patients during the past 7 days in Chattogram Diabetic General Hospital, Bangladesh was carried out. Data was collected from 11th August - 10th November 2021.
Results: This study has revealed among age groups, 41-60 cohorts showed highest diabetes rate (48.8%) in addition to in terms of the gender, prevalence of the diabetes in the females (52%) was more than that in males (48%). Highest patients suffered from diabetes for 01-05 years (43%). Only 58% of the patients were participated in Diabetes Management Program. In the prior of 7 days, 43% of the patients were followed a healthful eating plan regularly and 9% of the patients were not followed, 43% of the patients were participated in physical exercise regularly.
Conclusion: The results achieved from this work could give to devising actual strategies for provision of the comprehensive sound health care to the diabetic patients.
Keywords: Diabetes, hypertension, medication, pharmacological intervention, self-care activities.

INTRODUCTION

International Diabetes Federation (IDF) has forecasted that number of separates with the diabetes will rise from the 240 million in the year 2007 to 380 million in the year 2025, with almost 80% of disease burden in the low in addition to middle-income countries. More than the 60% of world's population with the diabetes will derive from Asia, because this remains world's most populated region[1]. In recent World Economic Forum (WEF) Report, increasing burden of the chronic diseases including the diabetes was high pointed as the major global danger predicted to reason substantial financial harm resulting from in the diabetic compli-cations, registry, clinical studies, prospective cohorts, case control, cross sectional cohorts, prevalence, cohorts, epidemiology, incidence, diagnosis, prognosis causes, causation, socioeconomic status, depression, ethnicity, psychosocial stress, pollutants, urbanization etc[2]. Separate hunts were performed for the specific Asian countries. In countryside Bangladesh, prevalence of the diabetes increased from the 2.3% to 6.8% amid 1999 and 2004[3].WHO goals to stimulate and provision adoption of the effective measures for surveillance, prevention in addition to control of the diabetes and its difficulties[4]. But WHO provides precise guidelines for prevention of major the noncommunicable illnesses including diabetes, grows norms in addition to standards for the diabetes diagnosis in addition to care; builds consciousness on global epidemic of the diabetes, by World Diabetes Day at 14 November and also conducts surveillance of the diabetes in addition to its risk factors[5]. WHO Global statement on diabetes delivers an overview of diabetes burden, involvements available to prevent in addition to manage diabetes and also recommendations for the governments, the civil society, individuals and private sector[6]. WHO module on the diagnosis and supervision of type 2 diabetes

transports together direction on diagnosis, management and classification of type 2 diabetes in the one document[7]. The component is for the policy-makers who design service delivery of the diabetes care, countrywide program managers accountable for training, the planning and also monitoring service distribution and also facility managers as well as primary care staffs involved in the clinical care in addition to monitoring processes and also outcomes of the diabetes care[8]. In April, 2021 WHO started Global Diabetes Compact, the global enterprise aiming for the sustained improvements in the diabetes prevention and also care, with the particular focus on provisioning low and also middle-income countries[9]. The Compact was bringing together countrywide governments, the UN organizations, nongovernmental organizations (NGO), the private sector entities, philanthropic foundations, academic institutions and people living with the diabetes and also international donors to effort on a shared dream of reducing risk of the diabetes and also ensuring that entirely people who were diagnosed with the diabetes have contact to equitable, affordable, comprehensive and quality treatment and also care. But in May 2021, World Health Assembly decided a Resolution on the strengthening prevention as well as control of diabetes[10]. It recommends act in the areas including increasing contact to insulin and promoting convergence as well as harmonization of regulatory necessity for insulin and also other medicines as well as health products for treatment of the diabetes as well as assessing feasibility and also potential value of the establishing the web-based tools to share evidence relevant to transparency of the markets for diabetes drugs and also health products[11].

The aim of the work is to present the current scenario of the outdoor diabetic patients in Chattogram Diabetic General Hospital[12,13]. The objective of this survey is to analyze the intentness of doing regular physical activities. The health and mental condition, which they are suffered, how they maintain their regular self-care activities. To find out the present condition of the patients. To find out habits that associated with diabetes.

METHODS

Study design and participants:

The study was conducted among Diabetic patients confirmed by Chattogram Diabetic General Hospital, Chattogram. This study was based on a sample of 480 out-patients who were diagnosed with the Diabetes seeking care amid 11 August 2021 to 10 November 2021. The Questions that asked to patients regarding their own-care activities during past 7 days.

Data collection procedure:

A self-reported questionnaire written in English was employed to collect data during the survey. The collected data relevant to study retrospectively by interviewing Diabetic patients as well as every information were recorded into the Google form. After the double checking every information and Google Forms were submitted as well as stored in database.

This survey was done by first researching published papers on Diabetes self-care management. The paper was searched on Google scholar, PubMed, Sci hub and retrieved 18 literatures. After that the paper were screened to 5 literatures. This was the cross-sectional, observational work carried out in the Chittagong Diabetes General Hospital, Bangladesh. Offline survey was done by bodily going to the hospital and asking questions to people. Those who didn't want to perform it were given the right to deny. Safety measures were taken for coronavirus spread. The questionnaire was consisted of 19 questions about participant's general demographic information, summary of diabetic self-care activities and own-care recommendations for the patients. The survey was conducted from 11th August to November 10th, 2021 where 410 from offline and 70 social media users responded and then the data was collected, analyzed and the result were prepared according to the responses.

RESULTS AND DISCUSSION

This survey based on present scenario of Diabetes by determining the practice of self-care activities in Chittagong Metropolitan Area. The survey was conducted from 11 October 2021 to 10 November 2021 where 70 social media users and 410 people from offline responded. Here the assessment has been done on the 480 responses that had been submitted by the people.

Subject characteristics

This Figure 1 shows that, the participants were divided into four categories based on their age difference. Most of the participants (n=234, 49%) were aged 41-60 years. Those who were above 60 years made up only 25% (n=119) of the participants.

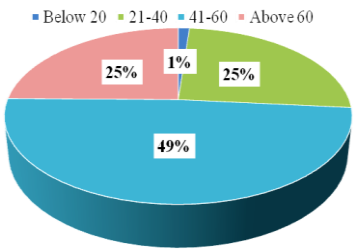

Figure 1: Age difference.

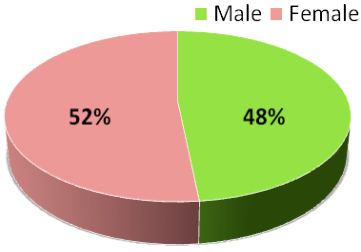

Figure 2: Gender.

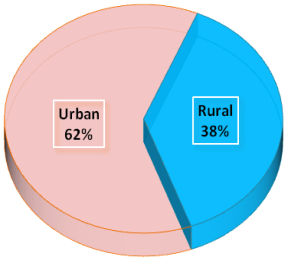

Figure 3: Residence area.

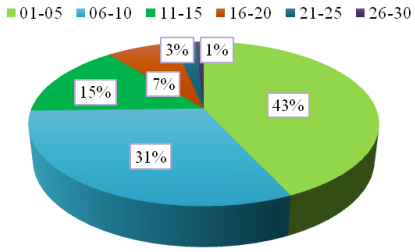

Figure 4: Duration of diabetes.

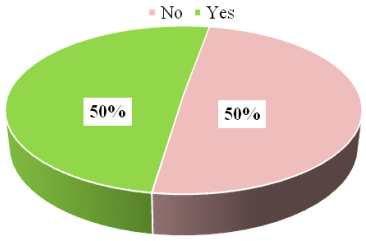

Figure 5: Treatment with Insulin.

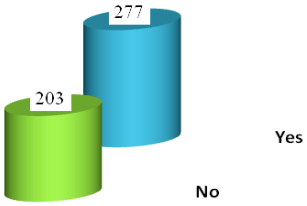

Figure 6: Diabetes Management Program participation.

Figure 2 shows that out of 480 study participants, 232 (48%) were male and 248 (52%) were female. Figure 3 shows that out of 480 study participants, 183 (38%) were lived in rural area and 297 (62%) were lived in urban area. Figure 4 shows that out of 480 study participants, highest patients suffered from Diabetes for 01-05 years (43%). Figure 5 shows that out of 480 study participants, 50% of the participants were treated with Insulin and 50% were not treated with Insulin.

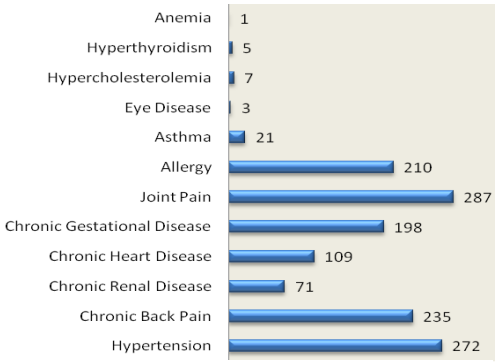

Figure 7: Additional chronic diseases.

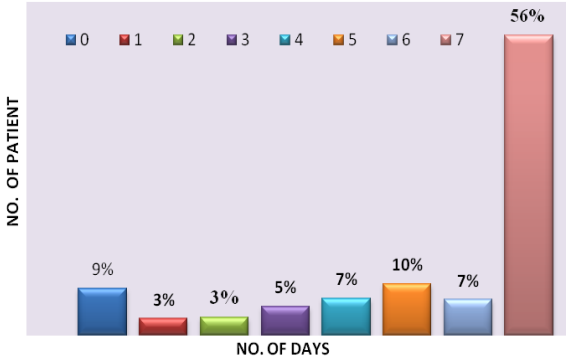

Figure 8: Number of patients followed a healthful eating plan during the past 7 days.

Diabetes Management Program participation:

Figure 6 shows that out of 480 study participants, 58% of the participants were participated in the Diabetes management program and 42% were not participated. Figure 7 shows that out of 480 study participants, joint pain was highest found (64%) and Hypertension was found (62%), so Joint Pain and Hypertensive patient are more affected.

Summary of diabetic self-care activities

In the prior of 7 days, this figure shows that most of the participants (n=270, which were almost 56%) were followed a healthful eating plan for 7 days. 7% of the participants were followed a healthful eating plan for 6 days, 10% for 5 days, 7% for 4 days, 5% for 3 days, 3% for 2 days, 3% for 1 day and 9% of the participants were not followed within those days (Figure 8).

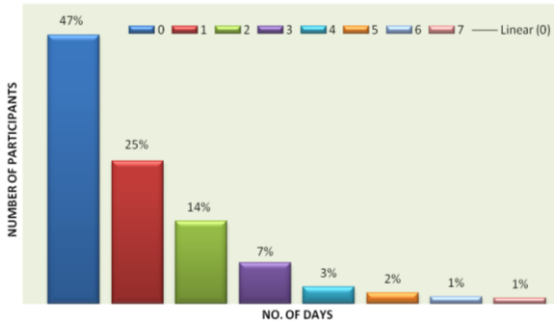

Figure 9: No. of participants ate high fat foods during the past 7 days.

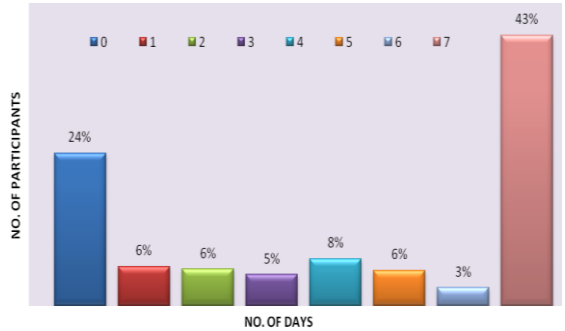

Figure 10: No. of participants Participated in at least 30 minutes of physical activity during the last 7 days.

In the prior of 7 days, this figure shows that most of the participants (n=5, which were almost 1%) were ate high fat foods for 7 days. 1% of the participants were ate high fat foods for 6 days, 2% for 5 days, 3% for 4 days, 7% for 3 days, 14% for 2 days, 25% for 1 day and 47% of the participants were not ate within those days (Figure 9). In the prior of 7 days, this Figure 10 shows that most of the participants (n=205, which were almost 43%) were participated in at least 30 minutes of physical activity for 7 days. Total 3% of the participants were participated for 6 days, 6% for 5 days, 8% for 4 days, 5% for 3 days, 6% for 2 days, 6% for 1 day and 24% of the participants were not participated within that days. In the prior of 7 days, Figure 11 shows that most of the participants (n=6, which were almost 1%) were tested blood sugar level

for 7 days. Total 0% of the participants were participated for 6 days, 2% for 5 days, 5% for 4 days, 9% for 3 days, 17% for 2 days, 58% for 1 day and 7% of the participants were not tested within that days. In the prior of 7 days, this Figure 12 shows that most of the participants (n=197, which were almost 41%) were checked their feet for 7 days. Total 3% of the participants were participated for 6 days, 5% for 5 days, 6% for 4 days, 9% for 3 days, 5% for 2 days, 6% for 1 day and 24% of the participants were not checked within that days. In the prior of 7 days, Figure 13 shows that most of the participants (n=68, which were almost 14%) were smoked for 7 days. Total 1% of the participants were participated for 6 days, 0% for 5 days, 0% for 4 days, 1% for 3 days, 1% for 2 days, 1% for 1 day and 83% of the participants were not smoked within that days.

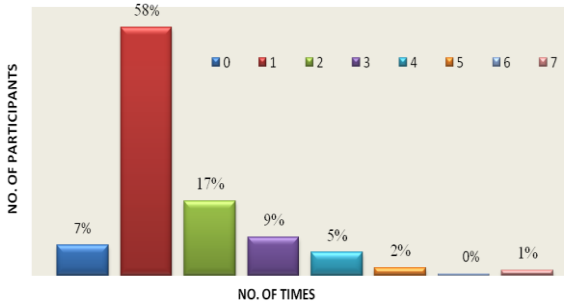

Figure 11: No. of participants tested blood sugar during the last 7 days.

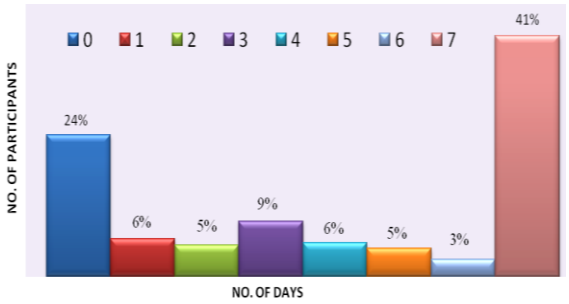

Figure 12: No. of participants checked their feet during the last 7 day.

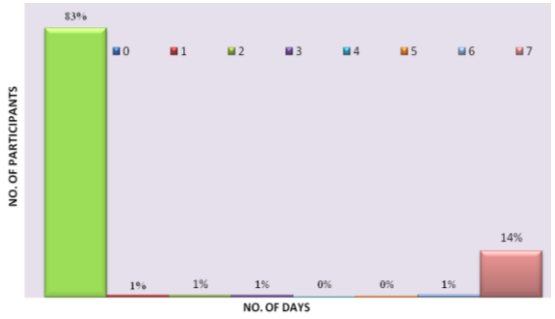

Figure 13: No. of participants smoked during the last 7 day.

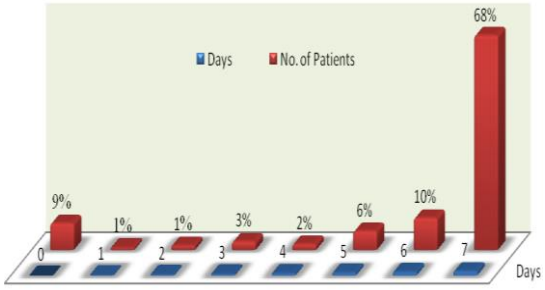

Figure 14: No. of participants took their recommended diabetes medication during the last 7 day.

In the prior of 7 days, this Figure 14 shows that most of the participants (n=328, which were almost 68%) were taken their recommended diabetes medication for 7 days. Total 10% of the participants were participated for 6 days, 6% for 5 days, 2% for 4 days, 3% for 3 days, 1% for 2 days, 1% for 1 day and 9% of the participants were not taken medications within that days.

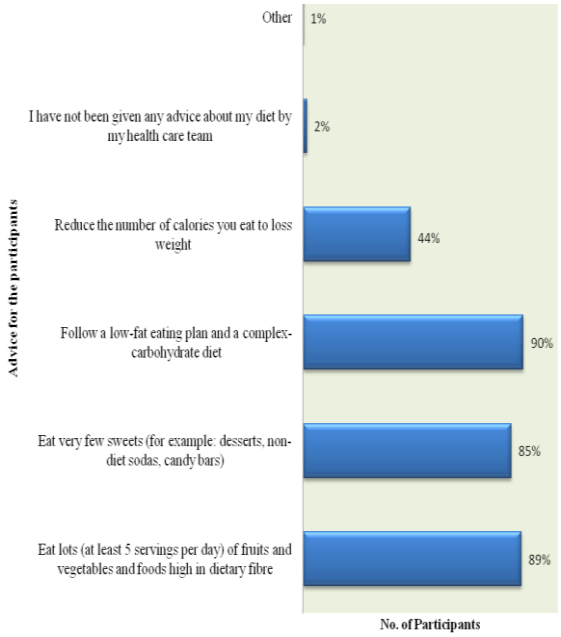

Figure 15: Diet plan for the participants advised by their health care team.

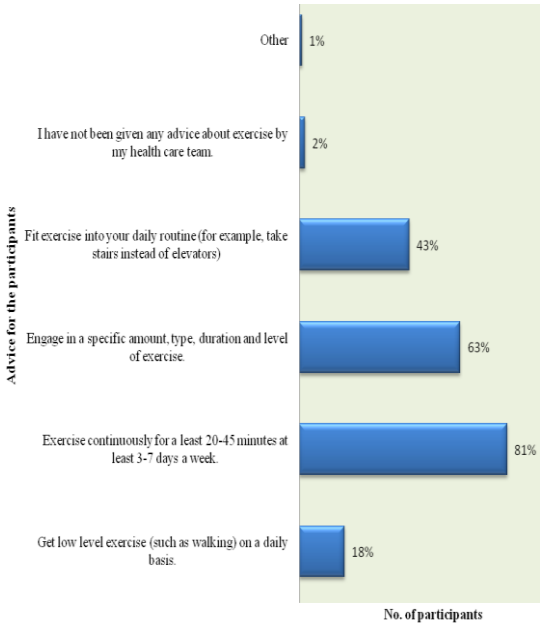

Figure 16: Recommended exercise plan for the participants advised by their health care team.

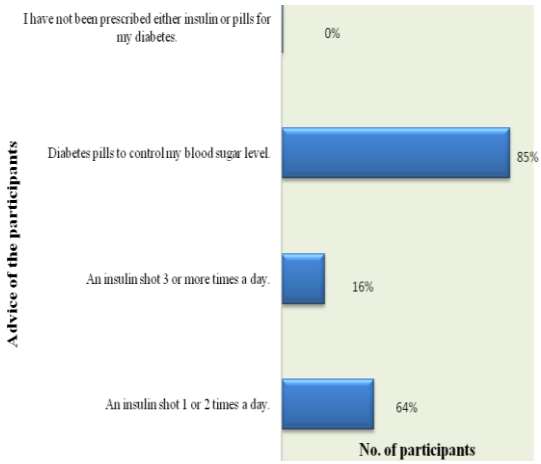

Figure 17: Recommended medications for the participants advised by their health care team.

CONCLUSIONS

Age had the positive impact on patient's eating control which can present that adult patient showed greater rates of the dietary control than newer patients. Another issue affecting dietary resistor is level of the education which designates more educated tolerant were associated through increased eating control. To prevent the morbidity and also mortality associated through diabetes patients' bestowed self-care activities were of vital importance. Self-attention activities relating to the pharmacological involvements predominated while the non-pharmacological caution, including food as well as physical exercise was fewer frequent. As these performs are vital for prevention of the complications as well as better quality life, more strengths should be placed to educate people with the diabetes. The results achieved from this work could give to devising actual strategies for provision of the comprehensive sound health care to the diabetic patients.

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AUTHOR'S CONTRIBUTION

Islam MS: writing original draft, methodology. **Akter M:** research design, data collection. Final manuscript was read and approved by the both authors.

DATA AVAILABILITY

Data will be made available on reasonable request.

CONFLICT OF INTEREST

None to declare.

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