PAPER COMPETITIONS

Diabetes Mellitus Control and Care in the COVID-19 Pandemic Quarantine in Mongolia: Retrospective Study

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Introduction

Reduction in outpatient visits and laboratory testing during the Coronavirus Disease 2019 (COVID-19) pandemic has raised concerns about gaps in diabetes management and glycemic control.

Objective

To investigate the changes in the treatment and control of people with diabetes during the COVID-19 pandemic quarantine.

Methods

106 glycemic control patients from three districts of six general hospitals in Ulaanbaatar were randomly selected as applicants, and consent and questionnaires were obtained through telephone contact. The questionnaire was developed based on the "Diabetes Guidelines" issued by the Ministry of Health of Mongolia. These findings include average blood glucose (BG) of fasting BG, 2-h postprandial BG, and bedtime to assess diabetes control. The main evaluation indicators included drug supply, shortage, and adherence to self-management behaviors.

Results

In total, 72.7% of participants had Type 2 Diabetes Mellitus (T2DM) and 83.3% of them were poorly controlled. 81.5% of the Type 1 Diabetes Mellitus (T1DM) participants had inadequate glycemic control. We retrospectively estimated the glycemic control using their previous HbA1c results. It shows that 70%

and 72% of them were adversely controlled before the isolation, although 79.7% of the respondents contacted their healthcare providers during the isolation period. All participants stopped treatment for an average of 50 ± 62.7 ($p<0.05$) days during the isolation period, 59% of which were due to drug supply and shortages, 41% due to isolation, thus had to postpone. The average BG level before isolation was 8.4 ± 6.9 mmol/l, the highest was 19.6 ± 10.2 mmol/l, and during the isolation period was 8.9 ± 5.3 mmol/l, the highest was 19.6 ± 10.8 mmol/l. The maximum value is 50 mmol/l.

Conclusion

The development of telemedicine as a healthcare service in Mongolia is necessary. We conclude that glycemic control among patients with diabetes mellitus during quarantine is substandard.

Keywords

Diabetes Mellitus, glycemic control, diabetes self management, lockdown effect