

Abstract

Introduction/Background:

The COVID-19 pandemic in Bahrain has led to significant changes in non-communicable diseases, with diabetes mellitus being a particular area of concern regarding glycaemic control in patients. According to the NICE guidelines, a good glycaemic control is defined by achieving an HbA1c of less than 7% (53 mmol/mol). The was to evaluate T2DM patients with adherence to NICE guidelines for HbA1c values and recommended testing intervals prior and during the COVID-19 pandemic in a tertiary care hospital in Bahrain.

Method:

A retrospective clinical audit was conducted, evaluating a convenience sample of 200 patients between July 1st to October 31st, 2020. Each month included 50 randomly selected patients where every third patient with type 2 diabetes was chosen. The objectives included evaluating patients' adherence in getting the recommended laboratory procedures and to compare glycaemic control during the pandemic and prior to the pandemic. Data analysis was conducted on SPSS and Microsoft Excel.

Results:

Sixty-three (31.5%) of patients had their HbA1c tested in a three interval from December 2019 to 2020 whilst twenty-three (11.5%) of patients had HbA1c evaluated from July 2020 to October 2020. The number of patients who had acceptable glycaemic control of an HbA1c of less than 7%. declined from 40 patients (20%) prior to COVID to fifteen (7.5%). Variables such as age, gender, co-morbidities and type of medications did not correlate with better or worse adherence regarding recommended laboratory testing or better glycaemic control.

Conclusion:

The COVID-19 pandemic resulted in fewer patients following the recommendations to test HbA1c regularly, thus less patients were able to attain acceptable glycemic control as per the NICE guidelines. To our knowledge, this is the first study that assessed glycemic control in patients with Diabetes Mellitus during COVID-19 in Bahrain, bringing about implications to increase efforts of improving glucose targets in this population of patients.