

FIVE-YEAR CLINICAL OUTCOMES FROM A MULTI-DISCIPLINARY ADULT INSULIN PUMP CLINIC IN THE UNITED ARAB EMIRATES

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Introduction

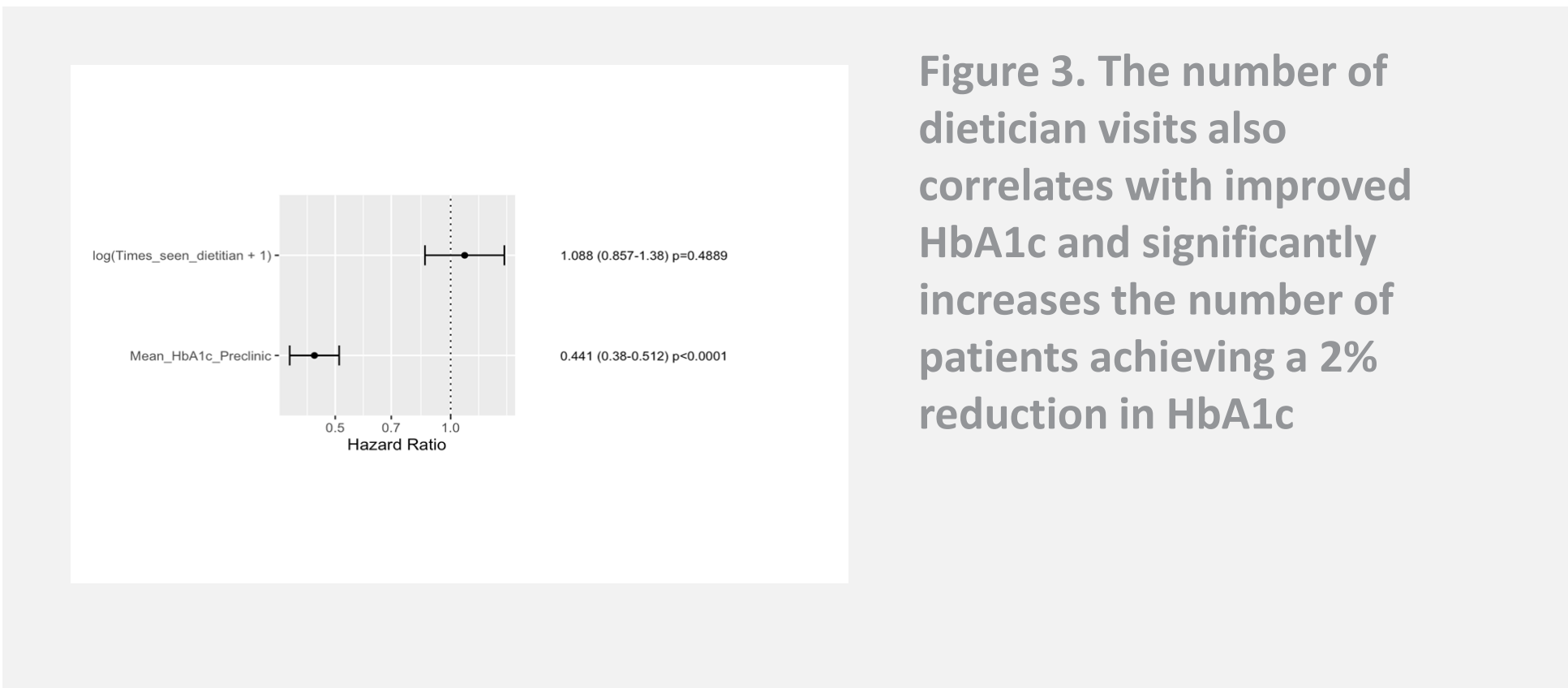
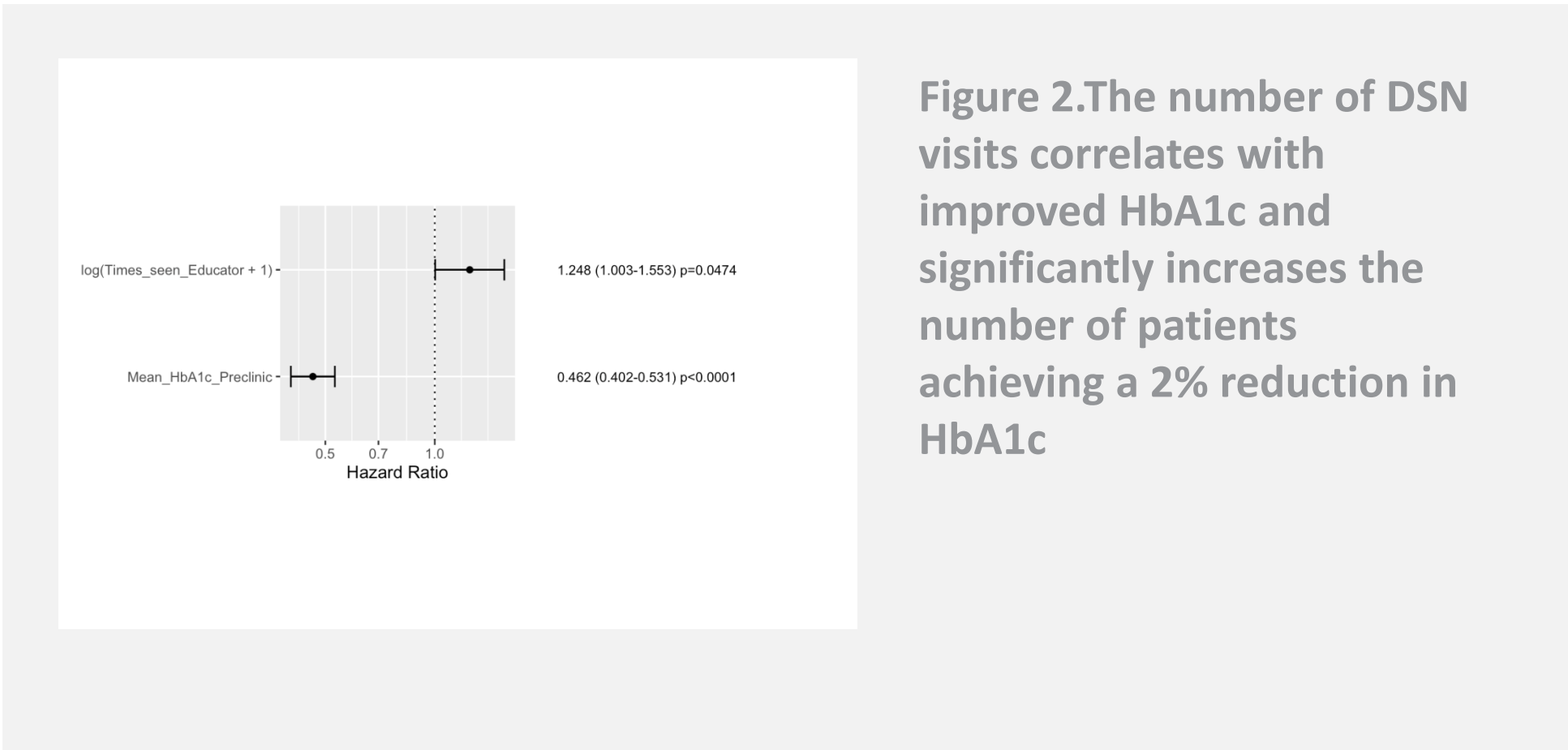
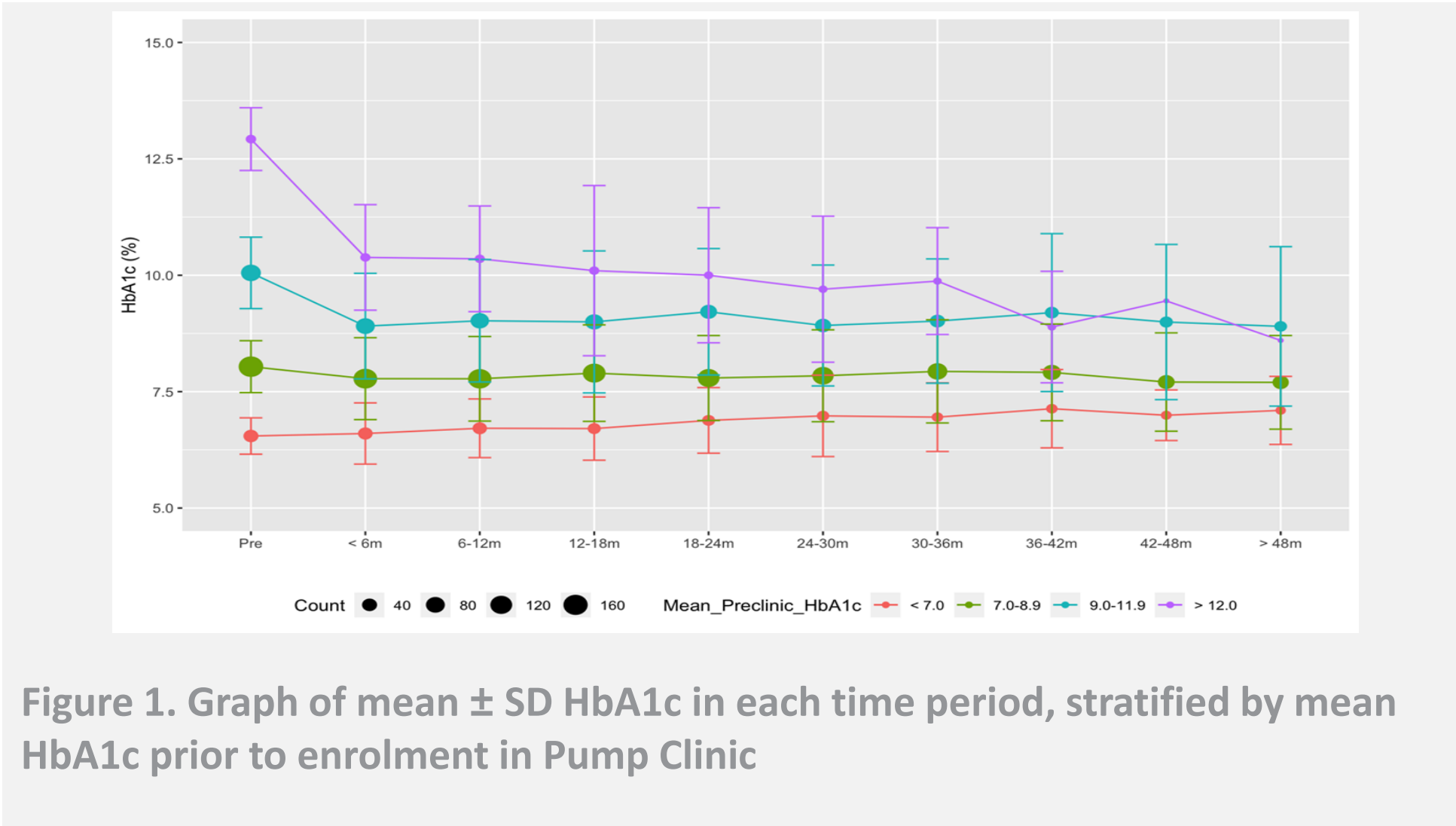
- Our Centre specialises in treating metabolic disease in a largely Emirati population.
- To improve services for people living with type 1 diabetes, we established a multi-disciplinary clinic dedicated to the management of adults using insulin pump therapy.
- This provides a setting where patients can be seen simultaneously by a diabetologist, dietician and diabetes specialist nurse (DSN).

Objectives

- To report 5-year clinical outcomes from the multi-disciplinary adult insulin pump clinic.
- To examine changes in glycated haemoglobin (HbA1c), Body Mass Index (BMI), lipids and blood pressure.
- To assess patient engagement with the multidisciplinary team, in particular with the dietician and DSN.

Methods

- A retrospective analysis of clinical data included patients with type 1 diabetes, aged 16yrs and over, using insulin pump therapy and attending the multi-disciplinary adult insulin pump clinic from October 2015 till December 2020.
- Patients were identified using the Diamond® electronic health record system.



Results

- We identified 527 patients with type 1 diabetes who attended the multi-disciplinary adult insulin pump clinic from October 2015 till December 2020.
- The majority were Emirati and 86% were nationals of the United Arab Emirates.
- The mean age was 26.5years at the first clinic visit and 57.3% were female. 43% have been living with type 1 diabetes for more than 10years.
- Mean HbA1c dropped from 8.7% (71.6mmol/mol) to 8.2% (66.1mmol/mol). Improvement in glycaemic control was greater in individuals with poor glycaemic control (Figure 1).
- 96% of patients were seen by the dietician and 100% were seen by the DSN. The number of DSN visits correlates with improved HbA1c and significantly increases the number of patients achieving a 2% reduction in HbA1c (Figure 2). The number of dietician visits also correlates with improved HbA1c and significantly increases the number of patients achieving a 2% reduction in HbA1c (Figure 3).
- BMI increased over time and increased with better control.
- There was no significant change in blood pressure or lipid control.

Conclusion

- This multi-disciplinary adult insulin pump clinic led to an improvement in glycaemic control.
- Our findings also highlight the essential role of the DSN and dietician in the successful management of people with type 1 diabetes, especially when using insulin pump therapy.
- Seeing patients in this setting allows for better communication between all members of the team, including the patient who leaves the clinic with a clear management plan agreed by all.