Self-management of type 1 diabetes in MENA region (Middle East and North Africa): Results of the IDMPS study


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BACKGROUND

Type 1 diabetes is associated with the risk of complications at both short-term (hyperglycemia, hypoglycemia) and long-term (microvascular and macrovascular complications). Self-management is an essential part of diabetes care to improve glycemic control and thereby to reduce the onset and progression of diabetes complications. Characterizing glycemic self-management and these determinants is important in order to promote its use and to improve the quality of care of patients with diabetes.

OBJECTIVES

- Describe characteristics of self-management of patients with type 1 diabetes in the MENA region (Alegria, Morocco, Tunisia and Egypt). Self-management was defined as self-monitoring of blood glucose and self-adjustment of insulin doses by the patient him/herself.
- Identify associated patients profiles.

RESULTS

Patients characteristics

- The mean age of patients was 34.3 ± 13.4 years, 50.2% were women. The mean length of diabetes diagnosis was 11.9 ± 8.8 years.
- Self-management of blood glucose was practiced by 57.1% of patients (Table 1).
- The mean HbA1c was 8.3 ± 1.9%, 23.3% of patients had HbA1c <7% (self-management: 28.4%, lack of self-management: 15.2%).
- 40.7% of patients presented diabetes complications (microvascular complications: 38.5%, macrovascular complications: 7.6%).
- Table 2 illustrates patients characteristics according to self-management status.

Predictive factors for self-management

- The variables proposed in the logistic regression model were: age classes (<40, [40-65], >65 ans), BMI classes (<25, [25-30], >30 kg/m²), residential area, education level, health insurance, time since diabetes diagnosis, complications of diabetes, diabetes education, number of visits to the endocrinologist or diabetologist, type of current insulin therapy, dose of insulin, HbA1c, fasting blood glucose, physician specialty.
- Results of logistic regression including 1642 patients are presented in Figure 1.

Figure 1: Multivariate analysis for identification of predictive factors of self-management by patient with T1 diabetes - N=1642

CONCLUSION

The results of this study shows that the frequency of glycemic self-management is still insufficient in the MENA region (57%).

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