Education in type 1 diabetes mellitus: what do educators really know?

A Tunisian multicenter study among young doctors, nurses and nutritionists

Type 1 diabetes mellitus is increasing worldwide in childhood. Education is an essential part of the package care at diagnosis. It addresses children with newly diagnosed type 1 diabetes and their families and is made by young doctors and paramedical staff (nurses and nutritionists).

The aim of the study was to assess the knowledge of the medical and paramedical staff concerning the global management of type 1 diabetes in children in a Tunisian context.

Methods

- Cross sectional survey (November 2017-January 2018): 6 pediatric centers (located in the main 3 tertiary care centers of the capital, Tunis) and one primary care center.
- Evaluation by a questionnaire:
  2. Food knowledge: dietary effect on blood glucose, food group knowledge, adequate food consumption.

Results

- Only 31.3% of the medical and paramedical staff had received specific education in diabetes in children: seminars 42% (Fig.1).
- Only 22% knew the glycemic index definition (p=0.680).
- 82.3% chose to favor the daily intake of slow-release carbohydrate (All nutritionists, p=0.001).
- Permitted food were correctly reported by 10.4% (Fig.6) and restricted food were correct for 13% (Fig.7).

Conclusions

- Education is known to be a key in the management of T1D in children.
- Educators are not always evaluated to assess the informations they spread.
- This study highlights the gap between what they should know and what they really know in a multicentric Tunisian study.
- Our results emphasize the need to develop well-structured training programs for health professionals to upgrade their basic knowledge of T1D, and thus improve clinical and quality of life outcomes for children with T1D.