Health-Related Quality of Life and Diabetes Control in Immigrant and Italian Children and Adolescents with Type 1 Diabetes and in their Parents.

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INTRODUCTION AND OBJECTIVES

- Type 1 diabetes (T1D) requires daily and complex management for both patients and their parents, impairing the quality of life.
- To ensure a high quality of life and an optimal metabolic control are major T1D treatment targets, so it is essential to optimize the acquisition of competence for disease management and collaboration with diabetes team, mostly in disadvantaged populations such as immigrant families.

Aim of this cross-sectional, observational study was to determine whether the metabolic control and the diabetes-specific health-related quality of life (D-HRQOL) of children and adolescents with T1D and their parents could be influenced by migrant status.

RESULTS

- Study population → 125 children and adolescents with T1D (males 53.6%), 102 mothers and 37 fathers
  - Group A → 40 foreign patients (32%; males 50%) having at least one foreign parent.
  - All patients, 32 mothers, and 12 fathers filled in the PedsQL™ 3.0 DM
  - Group B → 85 Italian patients (68%; males 55.3%) having both native Italian parents.
  - All patients, 70 mothers, and 25 fathers filled in the PedsQL™ 3.0 DM
  - Groups A and B were comparable for gender, chronological age, auxological characteristics, duration of T1D, frequencies of other autoimmune diseases and of severe hypoglycemic and DKA events in the year before study recruitment.

Table 1 – Clinical and metabolic characteristics of study population.

Table 2 – Child self-report PedsQL™ 3.0 DM

- No differences were found in fathers’ data.
- In all our young patients we found that HbA1c was negatively related to “Treatment barriers” (R=−0.319; p<0.001), “Treatment adherence” (R=−0.209; p=0.019), “Worry” (R=−0.214; p=0.017), and “Communication” (R=−0.238; p=0.008) scales.
- The multivariate regression model for child D-HRQOL scales identified the following significant predictive factors: MDI insulin therapy (β=0.438; p=0.008), Italian ethnicity (β=0.018; p=0.004), HbA1c (β=−0.228; p=0.029) for “Treatment barriers” scale; Italian ethnicity (β=0.584; p=0.046) for “Worry” scale.

CONCLUSIONS

- Our results strongly suggest that migrant status confers significant disadvantages in terms of T1D treatment, glycemic control, and D-HRQOL in children and adolescents with T1D and their mothers. Moreover, parents’ D-HRQOL data suggest that daily T1D management is usually supervised by mothers rather than fathers.
- D-HRQOL should be regularly investigated in youth with T1D and their parents.
- Specific challenges and educational interventions should be considered in clinical care of TID patients with migration background.