

# Quality of Life of patients with Type 1 Diabetes.

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## Objectives:

The objective of the study was to evaluate the Pediatric Quality of Life (PedsQL) of children from 8-12 y/o with T1DM, to compare PedsQL perceived by their parents, to understand gender and other factors influence on PedsQL and disease management.

## Materials and methods:

We conducted prospective non-randomized cross-sectional study. Children with T1DM were identified from pediatric endocrinology department registries. The onset of diabetes had to be more than 6 months. All consecutive patients from Armenia aged 8-12 years old with type 1 diabetes were included in the study. For the study we used the validated adapted PedsQL Inventory 3.0 Diabetes Module of child. Clinical variables analyzed were: time since diagnoses (in years), BMI, HbA1c, diet and exercising habits, frequency of hypoglycemia, comorbidity, insulin injected by child or parent.

## Results:

Results: A total of 132 children aged 8-12 years with T1DM and their primary caregivers (n = 132, 100% mothers) participated in this study including 60 (45.45%) girls (6.6 ( $\pm$  2.75) y/o) and 72 (54.55%) boys (7 ( $\pm$ 1.54) y/o) (p=0.318). Parents were either uneducated 84 (63.64%) or had secondary school education 48 (36.36%). Reported frequency of hypoglycemia is often occurred in 72 (54.55%) children. In most of the cases insulin was injected by child 84 (63.64%). The mean age of T1DM years was 6.82 ( $\pm$  2.17). HbA1C mean level was 8.42 ( $\pm$ 1.5). We found that HbA1c control can be influenced by parent/guardian and child through appropriate disease management which in turn can increase QOL. We identified lower scores of QOL reported by child versus primary caregivers. In group children girls seems to be more sensitive towards pain and difficulties associated with the disease, boys experience more difficulties related to treatment compliance and parents' involvement. Parents' education plays significant role in the management of child's disease and QOL.

## Conclusions:

In our study we identified lower scores of QOL reported by child versus primary caregivers. This interesting finding raises questions related to the reasons that parents underestimates the QOL of their children. In 8-12 y/o group of T1DM children girls seems to be more sensitive towards pain and difficulties associated with the disease, boys experience more difficulties related to treatment compliance and parents' involvement. Based on the assessment of primary caregiver and child attitudes for the same question, we found that primary caregivers mostly underestimate the child's QOL and disease management problems. Parents' education plays significant role in the management of child's disease and QOL. Psychosocial particularities of the given pediatric population also should be considered during interpretation of QOL scores and specifically for understanding the difference in answers reported by parents versus child.

