

# Assesment the Quality of Life in Children with Type 1 Diabetes

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Type 1 diabetes mellitus is a heterogeneous and life threatening chronic disorder characterized by destruction of pancreatic beta cells, culminating in absolute insulin deficiency. Type 1 Diabetes Mellitus affects the psychological and emotional well-being of patients and their families. This study aims to evaluate the health-related quality of life, to examine the agreement between child and parent reports of PedsQL, and to examine the influence of gender on the PedsQL and diabetes management of people with Type 1.

**Methods:** For the study the validated adapted PedsQL pediatric quality of life inventory 3.0 diabetes module was used. The age of child at the moment of questionnaire filling had to be 8 - 12 years. All consecutive patients from Armenia aged 8 - 12 years as of 2017 with type 1 diabetes were included in the study.

**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 and 72 (54.55%) boys (P = 0.318). In the whole cohort of children, 36 (27.27%) presented with comorbidities, 60 (45.45%) exercised regularly, and 48(36.36%) were on diet. In comparative analysis by gender we found different rates of comorbidities in boys and girls (36 = 60% in girls and 0 = 0% in boys, P < 0.001). There was statistically significant difference in mean HbA1C levels by gender: (9 1.78 for girls and 7.93 1.0 for boys P < 0.001).

Comparison of QOL mean scores between girls and boys showed that girls reported lower QOL mean scores for having stomachache (P < 0.001) and headache (P = 0.009), they more than boys felt hungry (0.019), tired (0.018) and get cranky or grumpy (P < 0.001).They also more than boys complained about difficulties associated with finger pricking (P = 0.033), exercising and doing sport

( $P = 0.002$ ), and to snack when going “low” ( $P = 0.002$ ). Girls are more embarrassed by their diabetes treatment than boys ( $P < 0.001$ ).