Quality of life in young patients with type 1 diabetes (T1D): preliminary results (MiPedQoL)

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Introduction
The Multi-informant Pediatric Quality of Life study (MiPedQoL) of University Hospital Ghent aims to explore the general and disease-specific quality of life in children with chronic diseases by self reports and parental proxy reports. This part of the study focuses on patients with type 1 diabetes in particular and investigates the correlations between QoL and psychological outcomes and metabolic control (HbA1c).

Material and methods
Participants
N = 40 children
N = 26 parents (17 mothers, 9 fathers)
Child age M (SD) 12.12 (2.82)
Child Sex Female: 40 % (N = 16)
Male: 60 % (N = 24)

• Children and their parents:
  • PedsQL™ 4.0 Generic Core
  • PedsQL™ 3.0 Diabetes Module
  • Glycated hemoglobin (HbA1c)
• Parents:
  • Hospital Anxiety and Depression Scale (HADS)
  • Strengths and Difficulty Questionnaire (SDQ)
• MiPedQoL substudy group compared with
  • children with type 1 diabetes (Laffel et al, 2003)
  • healthy children (Varni et al, 2001)

Results

Means for Peds™ 4.0 Generic Core & PedsQL™ 3.0 Diabetes Module - Parent Report

| Correlations between PedsQL™ 4.0 and HADS/SDQ/HbA1c – parent report |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                  | 2               | 3               | 4               | 5               | 6               | 7               | 8               |
| PedsQL Core Total| .84***          | .88***          | .56**           | .48*            | .47*            | .09             |
| PedsQL Core Physical| .56**          | .23             | .44*            | .42*            | .38*            | .05             |
| PedsQL Core Psychosocial| .70***         | .65***          | .43             | .44*            | .04             |
| PedsQL Core Diabetes Total| .56**        | .33             | .52*            | .24             |
| SDQ Total         | .60***          | .63***          | .08             |
| HADS Depression   | .77***          | .03             |
| HADS Anxiety      | .17             |
| HbA1c             | *p<.05; **p<.01; ***p<.001        |

Conclusion
- Self and parent QoL report (general and diabetes specific) is similar to previous type 1 diabetes populations
- Parent proxy report shows lower QoL compared to parent report of healthy children, except for the ‘physical’ subscale
- We identified high signficant positive correlations between the PedsQL™ Core scales and the Diabetes Module
- Higher QoL (general and disease specific) reported by parents is significantly correlated to lower parental feelings of depression and anxiety (HADS), as well as higher rates of the mental health in their children (SDQ)
- QoL and HbA1c were not found to be related, even though prior research has supported the relationship between metabolic control and QoL in type 1 diabetes
- Future research should investigate these relationships in a larger sample and by means of longitudinal measurements to further explore protective and risk factors of QoL in diabetes pediatric patients

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