



### Lifestyle and Health Related Quality of Life in adolescents with Diabetes Mellitus Type 1.

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#### BACKGROUND

Adolescence is a critical period of life, and even more if a chronic illness is present like type 1 diabetes mellitus (T1DM). The healthy lifestyle practice is one of the pillars of the T1DM treatment.

#### OBJECTIVES

To evaluate the association between lifestyle and Health Related Quality of Life (HRQoL) in adolescents with T1DM.

#### METHODS

Lifestyle and HRQoL were evaluated in 69 T1DM adolescents (34 male, mean age  $15,8 \pm 1,7$  years, with diagnosed with T1DM more than 2 years, without other diseases) attended to the Pediatric Diabetology Regional Center of our Department.

Lifestyle was evaluated through the following behaviours:

- healthy nutrition (KIDMED questionnaire),
- moderate/intensive physical activity (questionary),
- hours/day of television,
- consumption of tobacco, consumption of alcohol.

Health Style (HS<sup>+</sup>) was defined by concurrence of at least 4 of the following behaviours:

- KIDMED  $\geq 8$ , physical activity for 7 days/week,
- television < 2 hours/day,
- no consumption of tobacco, no consumption of alcohol.

HRQoL has been evaluated with *PedsQL™ 3.0 Diabetes Module*, composed by five scales:

- (1) diabetes symptoms, (2) management difficulties, (3) adherence to therapy, (4) worry and (5) communication.

#### RESULTS

Only 18 T1DM adolescents showed HS<sup>+</sup> (26%) and higher scores ( $p < 0,05$ ) than those with no health style (HS<sup>-</sup>) in scales 1, 3 e 4 of PedsQL, without difference in scale 2.

Even higher levels ( $p < 0,05$ ) were found in adolescents less sedentary (scale 1) and in those who practiced sport (scale 5).

Diabetic adolescents with HS<sup>+</sup> perceived the illness less problematically and showed increased adherence to treatment, they were less concerned about the disease and communicated more with doctors and sanitary team.

#### CONCLUSION

This is the first study that investigates the association between HRQoL and a cluster of healthy behaviors, these singularly examined in other papers of literature.

