



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

E. Mozzillo^{1,2}, E. Zito¹, E. De Nitto¹, C. Cerrato¹, R. Nugnes¹, V. Fattorusso¹, A. Franzese¹, G. Valerio².

¹ Department of Translational Medical Science, Section of Pediatrics, University of Naples Federico II, Naples, Italy

² Department of Movement Sciences, Parthenope University of Naples, Naples, Italy

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⁺) was defined by concurrence of at least 4 of the following behaviours:

- KIDMED ≥ 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⁺ (26%) and higher scores ($p < 0,05$) than those with no health style (HS⁻) 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⁺ 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.

