

PSYCHOLOGICAL CHANGES IN YOUTH WITH DIABETES: COMPARISON BETWEEN PREADOLESCENTS AND ADOLESCENTS

R. Longaretti, C. Pozzi, I. Achutegui, C. Trezzi, C. Docente, M. Langone, V. Favalli, G. Frontino, A. Rigamonti, R. Di Tonno, R. Bonfanti

Pediatric Diabetes, Diabetes Research Institute, Scientific Institute San Raffaele, Milan, Italy



BACKGROUND

The course of type one diabetic disease (T1DM) varies according to the period of life and in response to various external or internal factors.

Adolescence is an evolutionary phase that involves important developmental changes and identity construction. Furthermore adolescence involves the extension of resources, relationships and personal fulfillment.

T1DM and its management, especially in this life period, can lead to psychological distress, awareness fo limitation and impact on Self-redefinition.

AIM

Aim of study is to investigate the differences in psychological aspects between preadolescents and adolescents with diabetes.

METHOD

We conducted a retrospective analysis on psychological data that emerged within the school camps conducted in recent years (2013-2019) with preadolescents (PA: 12-14 yrs) and adolescents (A: 15-17 yrs).

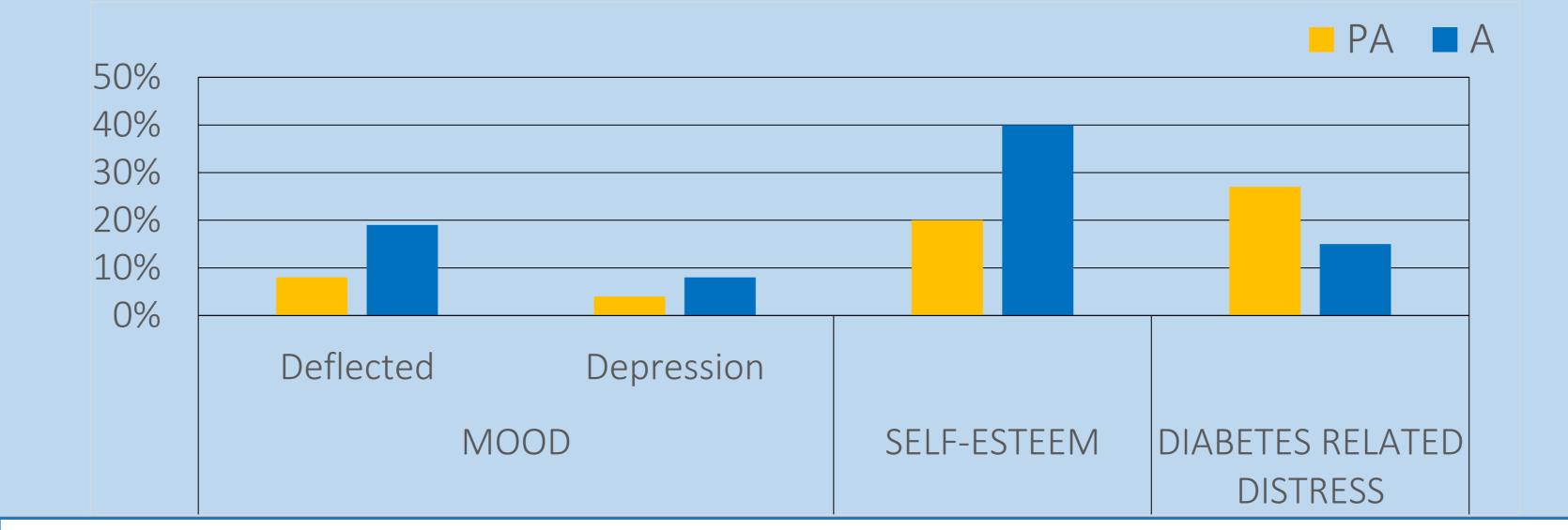
Descriptive and ANOVA statistical analyses were conducted using SPSS program.

n. PA	n. A	Psychological issue	Instruments
213	209	Diabetes related distress	PAID-Peds (Problem Areas in Diabetes Survey Pediatric Version) cut off>40 pathological
158	154	Self Esteem	Culture-Free Self Esteem Inventory for Children Form - cut off<24 problematic
205	211	Mood	WHO 5 (World Health Organization-Five Well-Being Index) cut off<50 deflected mood - < 28 depression
166	167	Anxiety	RCMAS-2 (Revised Children's Manifest Anxiety Scale-Second Edition) cut off>60 pathological SAFA A (Self Administrated Psychiatric Scale for Chidren and Adolescents)* cut off >70 pathological
124	124	Disorder Eating Behavior	DEPS-R (The Diabetes Eating Problem Survey – Revised) cut off>20 pathological

Table 1 – Psychological Tests administred to PA and A

RESULTS

- Psychological scores were within normal range but with wide dispersion and vary to age (table 2).
- Percentages of clinical cases in significant issues (graph 1).
- Eating disordered behaviors scores aren't statistically significant, but with an occurrence of clinical cases equal to 18% (PA) and 23% (A).



Graph 1 – Percentages of clinical cases in significant issues

Psychological issue 27.08±20.08 Diabetes related distress 23.22±15.81 p=0.03Self-Esteem 28.86±6.12 25.99±7.42 p=0.0002 59.32±19.40 68.33±18.38 Mood p<0.0001 49.53±6.99 48.92±9.24 Anxiety 47.73±9.39° 50.91±8.99* p=n.s. 12.02±8.84 Disordered Eating Behavior 14.02±8.12 p=n.s.

Table 2 – Highlighted the group with greater vulnerability.

CONCLUSIONS

Our data highlighted a vulnerability in the areas investigated, with variations according to the age and developmental needs of the young patients.

For the **younger ones**, the most complex aspect seems to be the adaptation to diabetes, probably due to their level of self-management skills and psycho-developmental challenges.

Teens seem to be more aware of T1DM management, while their difficulties are more focused on mood and self-esteem. These aspects could be linked to the need to integrate the chronic condition in the vision of themselves and in the process of building identity.

Data about eating disorders showed a frequency in line with literature but must be deepened in a larger group and with specific instrument.

Camps can improve psychological processing of the DMT1 condition giving the opportunity for peers of sharing the same daily life experience, decreasing sense of diversity.

Our study underlines the necessity to detect young patients at risk according to age and developmental needs.

The data must be studied in a larger sample, also involving those who do not attend the camps but can be a starting point for planning interventions differentiated by age.

REFERENCES

- Wasserman R. M. et al. Profiles of depressive symptoms and diabetes distress in preadolescents with type 1 diabetes. *Can J Diabetes, (45)* 2021: 436-443.
- de Wit M. et al. Validation of the WHO-5 Well-Being Index in adolescents with type 1 diabetes. *Diabetes Care*, 2007; Aug;30(8):2003-6.
- Young V. et al. Eating problems in adolescents with Type 1 diabetes: a systematic review with meta-analysis. *Diabet Med.* 2013; Feb;30(2):189-98.
- Markowitz J.T. et al. Youth-Perceived Burden of Type 1 Diabetes: Problem Areas in Diabetes Survey-Pediatric Version (PAID-Peds). J Diabetes Sci Technol. 2015; Apr 24;9.
- **King K.M. et al.** Perceptions of Adolescent Patients of the "Lived Experience" of Type 1 Diabetes. *Diabetes Spectr.* 2017; Feb;30(1):23-35.

ACKNOWLEDGEMENTS

Thanks to Pediatric Diabetes Equipe to San Raffaele Hospital and the Association of Families with Diabetic Children "Sostegno 70".

CONTACT INFORMATION

Pediatric Diabetes, Diabetes Reasearch Istitute — San Raffaele Hospital — Milan Italy

Contact: longaretti.roberta@hsr.it

