Diabetes Distress in Adolescents and Young Adults with Type 1 Diabetes

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OBJECTIVES

Background. Age and gender are important factors in adjustment and psychological well-being in patients with chronic physical illness.

Aim: to explore the gender and age differences in diabetes distress between adolescents and young adults with type 1 diabetes (T1D).

METHODS

The cross sectional population-based study was conducted as a part of joint Lithuanian–Swiss project "Genetic Diabetes in Lithuania"(supported by a grant of Lithuanian Research Council Lithuanian-Swiss program „Research and Development", CH-3-ŠMM-01/09 and the Federal Department of Foreign Affairs of Switzerland). All recruited to the project "Genetic Diabetes in Lithuania" participants, who at the time of the study beginning were of the age between 14 and 25 years, were asked to fill-in the Problem Areas in Diabetes (PAID) questionnaire. Of them, 538 (258 males and 280 females) agreed and were stratified by age: 255 adolescents (123 males and 132 females, age 14 – ≤18 years) and 283 young adults (135 males and 148 females, age 18 – 25 years).

Problem Areas in Diabetes (PAID) scale was used for evaluation of diabetes distress (Polonsky et al., 1995; Welch et al., 1997). Higher overall scores indicate more severe distress. An overall score equal or higher than 40 was proposed as the cut-off criterion, suggesting clinical distress (Snoek et al., 2015). Similarly to Miller & Elasy (Miller & Elasy, 2008) and according to our results of factor analysis, we used two subscales of the PAID : 1) Lack of Confidence in Self-Care subscale and 2) Negative Emotional Consequences subscale. Higher scores of a subscale indicate more severe distress of certain aspect.

RESULTS

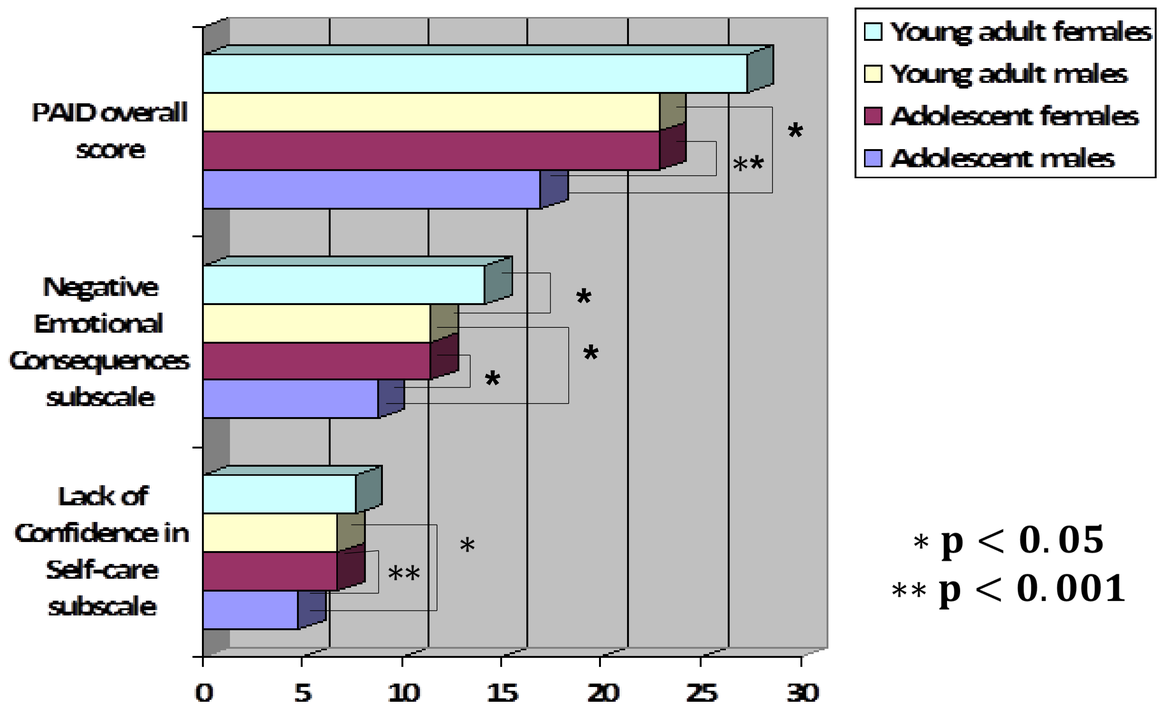

Figure 1. Differences of diabetes distress in adolescent and young adult males and females with type 1 diabetes

High diabetes distress level, suggesting clinical distress, was found in 22.8% of participants.
Lack of confidence in self-care (6.8±5.6 vs. 4.8±5.3, p=0.001), negative emotional consequences (11.5±9.3 vs 8.8±9.4, p=0.003) and PAID overall score (22.9±17.9 vs. 17.0±17.7, p=0.001) were higher in adult than in adolescent males. There was a trend towards higher prevalence of negative emotional consequences in adult compared to adolescent females (14.2±11.0 vs 11.5±8.8, p=0.052). Lack of confidence in self-care (6.8±5.3 vs 4.8±5.3, p<0.001), negative emotional consequences (11.5±8.8 vs 8.8±9.4, p=0.001) and PAID overall score (22.9±16.9 vs 17.0±17.7, p<0.001) were higher in adolescent females compared to males. Negative emotional consequences score was higher in adult females compared to males (14.2±11.0 vs 11.5±9.3, p=0.041).

CONCLUSIONS

High overall diabetes distress score, suggesting clinical distress, was found in as much as 22.8% of young people with T1D, and it appeared to be higher in young adults compared to adolescents: lack of confidence in self-care, negative emotional consequences, as well as PAID overall score were more expressed in adut compared to adolescent males and negative emotional consequences were more prevalent in adult than in adolescent females with T1D. The overall diabetes distress in adolescent girls was found to be more pronounced compared to adolescent boys. Similarly, in adult patients, females had higher negative emotional consequences aspect of diabetes distress compared to males.
Our findings add to evidence suggesting the importance of addressing diabetes distress in clinical care and the necessity of wider picture beyond the physical manifestation of diabetes to be taken into consideration.

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