**Exploring the impact of psychology on diabetes distress in young adults with type 1 diabetes**

**Background&Aim:** Diabetes distress (DD) refers to the overall adverse emotional burden of living with diabetes. Untreated, DD does not tend to self-resolve and is associated with an increase in HbA1c and glycaemic crises such as diabetic ketoacidosis (DKA). This retrospective study aimed to investigate the impact of intervention by a psychologist on high DD in adolescents and young adults aged 15 to 26 years who were living with type 1 diabetes mellitus (T1DM).

**Methods:** Data was collected on all T1DM patients attending a tertiary hospital diabetes transition clinic over 7 years. Inclusion criteria comprised a Problem Areas in Diabetes (PAID) questionnaire score ≥40 indicating high DD, at least two available PAID scores, and in the intervention arm of the study a baseline PAID score prior to and following psychologist intervention. Linear and logistic multivariable regression was used to analyse the association between psychology and change in PAID score, HbA1c and DKA presentations.

**Results:** 81 patients (69.1% female) with DD and median age 19.2 years (IQR 4.6) were followed for a median of 3.7 (IQR 2.3) years. Of the 52 patients (64.1%) who saw a psychologist, 44 saw the transition clinic diabetes psychologist and 8 saw a private psychologist. Multivariable linear regression, adjusting for age and sex showed an estimated mean decrease of 28.74 points on PAID ([-42.20, -15,29], p<0.001) between patients who visited a psychologist compared to those who did not. Additionally, the annual rate of DKA presentations decreased by 0.67 ([-1.24, -0.10]; p=0.023) amongst patients who attended psychology services. A statistically significant change in HbA1c levels was not observed.

**Discussion/Conclusion:** Intervention by a psychologist in young people with T1DM and high DD reduces both DD and DKA. This evidence should drive integration of tailored psychologists for DD management into multidisciplinary diabetes care.

 