**Title:** Understanding Diabetes-Related Distress in People Living with Type 1 Diabetes: Experience of an Australian Quartenary Hospital Diabetes Centre

**Background:**
Diabetes distress (DD) is a significant contributor to suboptimal self-management in individuals with diabetes. Presently, there are limited data regarding the prevalence and characteristics of DD among people with Type 1 Diabetes (T1D) in Australia.

**Aim:**
To determine the current level of DD and examine its relationship with metabolic control in adults with T1D attending the Royal Prince Alfred Hospital (RPAH) Diabetes Centre.

**Methods:**
A cross-sectional, observational study was conducted from February to May 2025. Adults (>18 years) with T1D, proficient in English, and scheduled for clinic appointments were recruited via telephone. Participants completed an online survey, which included the validated 28-item Type 1 Diabetes Distress Scale (T1-DDS), prior to their review appointment.

**Results:**
A total of 82 adults (mean age 42.9±14 years; 55% male) with T1D (average duration 20.5±15.5 years) were recruited. The mean HbA1c for the cohort was 7.5±1.2%. Fifty-four percent (44/82) were treated with Multiple Daily Injections, and the remainder with Continuous Subcutaneous Insulin Infusion.
The average T1-DDS score was 2.2±0.7, indicating moderate overall distress. Subscale analysis revealed high distress in the domain of powerlessness (mean 3.1±1.2), and moderate distress in domains of management (2.2±0.9), hypoglycaemia (2.3±1.0), and eating (2.6±1.1).
Younger participants (<40 years) reported significantly higher distress levels (p=0.03); 23%(8/35) of participants under 40 experienced high overall distress (T1-DDS score ≥ 3.0), compared to 9% (4/47) of participants over 40 years. No significant differences in distress were observed by gender, treatment modality, diabetes duration, or across the spectrum of HbA1c levels measured.

**Conclusion:**
Moderate diabetes distress is prevalent among adults with T1D attending the RPAH Diabetes Centre and appears to be independent of glycaemic exposure. Powerlessness emerged as the most pronounced domain of distress. Younger adults reported higher levels of distress, highlighting the need for targeted support and coping strategies for this important subgroup.

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