**Development and validation of a questionnaire to assess quality-of-life in Australian adults living with type 1 diabetes: A pilot psychometric study**

**Aims**

To develop and validate a new questionnaire aimed at identifying the factors influencing the quality of life (QoL) of Australian adults living with type 1 diabetes (T1D), and to determine whether dietary well-being is one of these factors.

**Methods**

This study used a mixed-methods, cross-sectional research design. Questionnaire development included literature review, pre-testing, semi-structured interviews, expert evaluation, and pilot testing. Questionnaire validation involved an exploratory factor analysis (EFA) to identify the initial factor structure. Confirmatory factor analysis (CFA) determined domain validity. Further statistical analysis included convergent, relative, predictive validity, and reliability.

**Results**

The initial questionnaire had 28-items relating to physical, psychological, social, and dietary well-being. CFA revealed ‘psychological’ and ‘social’ items underpinned the four questionnaire domains. This showed that the psychological issues related to QoL are of importance to individuals living with T1D and that they are intertwined with dietary well-being. The four domains identified were: 1) ‘Coping and Adjusting’ (4-items), 2) ‘Fear and Worry’ (4-items), 3) ‘Loss and Grief’ (3-items), and 4) ‘Social Impact’ (4-items). Significant correlations were revealed between ‘Coping and Adjusting’ and HbA1c (rs= -0.44, *p*<0.01) and ‘Social Impact’ and HbA1c (rs= 0.13, *p*<0.01) respectively. Acceptable convergent validity and reliability (test-retest, internal consistency) was observed in all domains.

**Conclusions**

The new Australian T1D QoL questionnaire found that dietary well-being does not independently affect QoL. Instead, psychological issues are interwoven with dietary well-being in our sample. This pilot study concludes that psychological factors predominantly impact QoL in Australian adults with T1D. Therefore, it highlights the importance of integrating psychological support into the management of T1D to enhance the QoL and health outcomes of Australian adults.