

Validity and Reliability of Quality-of-Life Scale for Iraqi Diabetic Patients Among Type 1 Diabetes Mellitus Patients

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ABSTRACT

Diabetes mellitus significantly impacts life. Evaluating quality of life (QOL) is essential for diabetes management; there are many tools to assess QOL. However, no validated instruments are currently designed for Iraqi patients with type 1 diabetes (T1D). To assess the validity, reliability, and hence suitability of QOL scale for diabetic patients (QOLSID) for use among Iraqi patients with T1D. A cross-sectional study conducted at Faiha Specialized Diabetes, Endocrine and Metabolism Center in Basrah, Iraq, from February 17th to May 29th, 2025. A convenient sample of 100 Iraqi patients diagnosed with T1D completed the paper based QOLSID. Internal consistency was assessed using Cronbach's alpha. Construct validity was checked by correlating total scale score with the level of glycosylated hemoglobin (HbA1c). For test-retest reliability, 37 returned back to fill the questionnaire. The tested scale exhibited an acceptable internal consistency (Cronbach's alpha = 0.630). For test-retest values, the correlation for the overall total QOLSID scores was 0.422 ($P = 0.020$). A significant inverse correlation was found between QOLSID score and HbA1c (Spearman's $\rho = -0.311$, $P = 0.002$). This correlation was statistically significant across the entire cohort of patients with T1D, encompassing both adolescent and adult age groups. Using a median cutoff point, the results demonstrated a significant ability to distinguish between T1D patients based on their HbA1c levels and the presence of diabetes-related complications. The QOLSID questionnaire is a valid and reliable tool for evaluating the QOL of T1D patients in Iraq.

Keywords: *Quality of life; QOLSID validity and reliability; Type 1 diabetes; Iraq.*

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