respective. Each of the three factors and the BG item discriminated between those patients who preferred inhaled insulin and those who preferred injectable insulin (all p < 0.001). Factors one and three and the BG item demonstrated the ability to detect change from baseline (injectable treatment) to following treatment with inhaled insulin (all p < 0.001). Factor analysis and interscale correlations indicated that the 16 items could be summed to a total IDSQ score. Cronbach’s α for the total score was 0.93. CONCLUSION: The IDSQ is a reliable and valid instrument to assess insulin delivery system satisfaction in patients with type-1 diabetes.

**PDB36**

**RELIABILITY AND VALIDITY OF THE GENERAL DIABETES KNOWLEDGE TEST**

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**OBJECTIVES:** Public health education is a cornerstone in primary prevention of diabetes mellitus (DM). However, valid and reliable tools to evaluate outcomes of DM education among the general public are lacking. We aim to evaluate the reliability and validity of the General Diabetes Knowledge Test (GDKT) for use among subjects with and without DM. **METHODS:** The GDKT is a 36-item questionnaire (range 0–100) constructed based on existing public DM education materials and covers six content areas: overview, risk factors, symptoms, complications, management and monitoring (for both Type-1 and 2 DM). To achieve wide representation, English-speaking subjects (aged > 21) were recruited by convenience sampling at a public health promotion event. The GDKT was first administered to 54 DM and 42 non-DM subjects. Eighteen subjects voluntarily participated in retest (all were DM). Internal consistency of GDKT was assessed using Kuder-Richardson Formula 20 (KRF20). Item difficulty was assessed by calculating the ratio of number of correct answers to number of respondents, range 0.00 (most difficult) to 1.00 (least difficult) and compared between DM and non-DM subjects using Students’ t-test. Test-retest reliability was assessed using intraclass correlation coefficient (ICC). Construct validity was assessed using a known-group approach where DM subjects were expected to have higher GDKT scores than non-DM subjects. **RESULTS:** Internal consistency of GDKT was high (KRF20 = 0.9289). Item difficulty ranged from 0.59–0.97 and was significantly different (p < 0.05) between subjects with and without DM for 8 items. Test-retest reliability was moderate (ICC = 0.54, median = 94.4, range = 72.2–100.0, 95% CI: 0.77). Mean scores at first (91.8 ± 9.83) and second (93.3 ± 1.24) administrations were not significantly different (p = 0.38). As expected, DM subjects reported better mean (±SD) GDKT scores (90.8 ± 11.35) compared to non-DM subjects (85.7 ± 20.80) although the difference was not statistically significant (p = 0.13). CONCLUSION: The internal consistency and construct validity of the GDKT was demonstrated in this study.