Abstracts for the 36th Annual Meeting of the International Society for Pediatric and Adolescent Diabetes (ISPAD)

27-30 October, 2010
Buenos Aires, Argentina
Reliability and validity of the Malay translated version of diabetes quality of life (DQoL) questionnaire

N.Y. Jalaludin1, F. Md. Zain2, M.H. Mohd Hussain3, J.Y.H. Hong4, Z. Hussain4, F. Ismail5, A. Buang6 & J. Haniff8

1University of Malaya, Department of Paediatrics, Kuala Lumpur, Malaysia, 2Putrajaya Hospital, Paediatrics, Putrajaya, Malaysia, 3Putrajaya Hospital, Medicine, Putrajaya, Malaysia, 4Selangor Hospital, Paediatrics, Selangor, Malaysia, 5Clinical Research Centre, Kuala Lumpur, Malaysia

Introduction: Many studies reported poorer quality of life (QoL) in patients with diabetes. One of the tools used is the Diabetes Quality of Life (DQoL) questionnaire in English language. A validated instrument in Malay language is highly needed to assess patient’s perception of QoL in Malaysia.

Objective: To translate the DQoL questionnaire into Malay language and to determine its reliability and validity.

Methodology: Translation and back-translation were used. An expert panel reviewed the translated version for conceptual and content equivalence. The final version was then administered to paediatric patients with type 1 diabetes mellitus (T1DM) from Ministry of Health and university hospitals between August 2006 and September 2007. Reliability was analysed using Cronbach’s alpha while validity was confirmed using concurrent validity (HbA1c and self-rated health score).

Result: A total of 82 T1DM patients (38 males) aged 10–18 years were enrolled from eight hospitals. The reliability of overall questionnaire was 0.91 while the reliabilities of the three domains were between 0.73 and 0.86. HbA1c was positively correlated with worry (P = 0.03) i.e. patients who were more worried about their disease had higher HbA1c. Self-rated health score (an item in the DQoL where higher score indicates better health) was found to have significant negative correlation with “satisfaction” domain (P = 0.013) and “impact” domain (P = 0.007) (where higher score indicates poorer QoL). This showed that patients with higher self-rated health scores had better satisfaction with life, and that diabetes had lower impact on their life. Four items (sleep, feels good about oneself, being teased, frequent toilet visits) in the “impact” domain had corrected item to total correlation lower than 0.2.

Conclusion: The Malay translated version of DQoL was reliable and valid at the domain level. However, further work is needed to improve the “impact” domain so that the overall validity can be improved.