OBJECTIVE: Diabetic peripheral neuropathy (DPN) is a debilitating complication of diabetes and causes sensory symptoms that impact health and functionality. The purpose of this study was to test the hypothesis that there was a direct association between the symptoms associated with DPN (SDPN), as measured by a new instrument the Neuropathy Total Symptom Score (NTSS-6 [self administered]), and health-related utility as measured by the EQ5Dmax. The NTSS-6 provides a score of 0 to 3.66 in each of six domains. The score (range 0 to 21.96) is simply summed with zero meaning no symptoms. METHODS: A postal survey using various instruments including the NTSS-6 and the EQ5D was mailed to subjects identified at random as having either type-1 or Type-2 diabetes using the same methods as the Health Outcomes Data Repository (HODaR). Univariate and multivariate analysis were applied. This is a preliminary analysis of the first 604 returns. RESULTS: The mean age of respondents was 64 years (IQR 55–73); 58% were male and the mean duration of diabetes was 14 years (IQR 5–18). Of the 604 patients, 24% reported having no neuropathic symptoms. The overall mean (SD) EQ5Dmax was 0.65 (0.33), and mean NTSS-6 score 6.2 (median and IQR 4.33, 1.0–10.33). In univariate analysis there was a direct association between the two instruments (correlation coefficient 0.57). Modeling the EQ5Dmax in multiple linear regression analysis to account for confounding, the NTSS-6 score was found to remain directly associated with utility, whereby an increase of one unit on the NTSS-6 resulted in as reduction in the EQ5Dmax of 0.029 units (p < 0.001). CONCLUSIONS: SDPN, as measured by the NTSS-6, were directly associated with health-related utility. After accounting for confounding factors, a unit change in the NTSS-6 was equivalent to a change in utility that is considered to be clinically meaningful.

DEVELOPMENT OF A SCALE FOR DIABETIC PATIENT PROFILING BASED ON PATIENT ATTITUDE TOWARDS INSULIN

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OBJECTIVE: To develop self-report questionnaires for physician use in the evaluation of diabetic patient reluctance to start or step up insulin regimens. METHODS: An Advisory Committee (AC) was set up. It consisted of 3 diabetes specialists/endocrinologists, 1 behavioural psychiatrist and 2 general practitioners. Three patient focus groups were formed from a pool of 23 type-1 and 2 diabetic patients. Interviewees were asked to list fears, constraints and benefits associated with insulinization, injection and insulin regimen step-up. After analysis of the focus groups, a list of detailed concepts and two test questionnaires were developed and independently validated by the AC with content validity being assessed on 16 type-1 and 2 diabetic patients. Patients completed the questionnaires before being systematically asked to comment on the questionnaire as a whole and more specifically on each element of the questionnaire. Questionnaires were then redrafted and tested on 16 other patients. After analysis of patient tests, a revised questionnaire was produced and validated by the AC. RESULTS: Eleven elements (Insulinization: symbolic, fears, constraints, benefits, product physical characteristics. Injection: symbolic, fears, constraints, positive points. Insulin regimen intensification: symbolic, fears) and 31 detailed concepts were identified using the patient focus groups. Each test questionnaire contained 22 items (20 relating to insulin regimen start or insulin regimen step-up plus 2 relating to inhaled insulin). After initial cognitive debriefing, one item was added, taking each questionnaire to 23 items and response choices were significantly modified in both questionnaires by the AC. After second cognitive debriefing 2 items were excluded from both questionnaires by the AC. The pilot questionnaires therefore included 21 items. CONCLUSION: These pilot questionnaires may help physicians to assess the hurdles faced by diabetic patients in starting or stepping up insulin regimens. The questionnaires are now undergoing item reduction, scoring and validation in two case-report studies.