Translation, adaptation and validation of the diabetes distress scale for Indonesian diabetic outpatients with various types of complications
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EQ-SD during 2016. A visual analog scale (VAS) score and health index score were computed, and the difference was measured. Frequency of hypoglycemia events varies according to BMI category, with decrements in some scores, such as PCS, and decrements relative to T1DM patient versus T2DM patient (< 0.01). Post hoc analysis represented by dualglutide and liraglutide medication profiles also differed, with fewer Japanese participants ‘somewhat willing’ or ‘very willing’ (dualglutide: 42.9%; liraglutide: 4.4%) compared to their UK counterparts (dualglutide: 30.5%).

PDB30

ESTIMATING THE ECONOMIC BURDEN OF HYPOGLYCEMIA IN PATIENTS WITH TYPE 1 AND TYPE 2 DIABETES MELLITUS IN AUSTRIA

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OBJECTIVES: To compare preferences for treatment features of dulaglutide and liraglutide among patients with type 2 diabetes (T2DM) in Japan and the United Kingdom (UK), and their willingness to self-inject diabetes medication. METHODS: Two discrete choice experiments (DCE) were conducted in Japan and the UK among patients with T2DM who had not previously self-administered injectable medications. The DCEs were conducted through in-person interviews and examined six attributes: dosing frequency, blood sugar (HbA1c) change, weight change, type of delivery system, frequency of hypoglycemia, and costs. Utility values were estimated using logit regression models and used to calculate relative importance (RI) values for each attribute. Prior to completion of the DCE, participants were queried about willingness to self-inject medication for T2DM. Following the DCE, participants were asked their willingness to take medication represented by dulaglutide and liraglutide medication profiles.

PDB32

PREFERENCES FOR TREATMENT ATTRIBUTES OF DULAGLUTIDE AND LIRAGLUTIDE AMONG PATIENTS WITH TYPE 2 DIABETES MELLITUS AND THEIR WILLINGNESS TO SELF-INJECT DIABETES MEDICATION: A COMPARISON BETWEEN JAPAN AND THE UNITED KINGDOM

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OBJECTIVES: To assess health care costs and productivity losses associated with hypoglycemia in type 1 and type 2 diabetic patients per person and for the study. METHODS: The target population comprised type 1 diabetics and type 2 diabetics with self-reported diagnosis of T2D. The review was conducted to identify studies reporting on epidemiology, health care resource use and work productivity losses of hypoglycemia. This was supplemented by market- based estimates. Results: Health care resource costs arising from hypoglycemia in Austria in 2015 amounted to approximately €50 million per year: around €34 in direct healthcare costs (medication costs and community care costs as well as costs incurred in the hospital sector) and €15.6 million in costs of lost productivity induced by hypoglycemia among persons of working age. Annual health care resource costs of hypoglycemia for a type 1 diabetic are over three times that of a type 2 diabetic (€186 per T1DM patient versus €60 per T2DM patient) and differ significantly according to BMI category (p < 0.03) per T1DM patient versus €11 per T2DM patient). However, due to the far higher prevalence of type 2 diabetes, nearly three-quarters of total annual direct costs of hypoglycemia can be attributed to type 2 diabetes (approximately €9 million per year for T1DM versus €25 million for T2DM). Due to differences in the age distribution of diabetic patients (around 3 times as many persons are of working age in the type 1 diabetes population as in the type 2 diabetes population), total indirect costs per year are twice as high for type 1 diabetes as for type 2 diabetes (€0.7 million vs. €4.9 million). CONCLUSIONS: Hypoglycemic events constitute a significant economic burden, which may be reduced by improved diabetes management.
OBJECTIVES: To translate, adapt and validate the Diabetes Distress Scale (DDS) instrument for Indonesian Type 2 diabetes mellitus (T2DM) outpatients with various types of complications. METHODS: Participants were recruited from four hospitals and two primary healthcare facilities. The procedure of the study included forward and backward translations, an adaptation testing with a small subset of participants, and a validation test. Factor analysis with maximum likelihood estimation and promax rotation was used to investigate the instrument structure. Internal consistency among the items was estimated using Cronbach’s alpha for each of the four DDS domains. The instrument was labeled DDS17 Bahasa Indonesia. RESULTS: 324 participants (246 from hospitals and 78 from primary healthcare facilities) were involved in this study. Understanding of the exact meaning of questions by study participants was improved by adding T2DM daily activity examples (e.g. diet, exercise and adherence to therapy) to several questions after the translations and adaptation procedure. The factor analysis showed correlation among the four factors ranging from 0.40 to 0.67. The order in the factor analysis of the four domains was distress, and regimen distress. The internal consistency for the four domains ranged from 0.78 to 0.83. CONCLUSIONS: The DDS17 Bahasa Indonesia provides a valid and reliable scale for assessing distress of Indonesian T2DM outpatients. The use of the tool in future research and clinical trials is recommended for the Indonesian context.

PDB37 AN OBSERVATIONAL STUDY ON HEALTH RELATED QUALITY OF LIFE IN DIABETES MELLITUS PATIENTS

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OBJECTIVES: The main objective of the present study focuses on evaluation of physical and social aspects on health related quality of life in Diabetic Mellitus patients in representative sample population. METHODS: The study consisted of a representative population sample of 325 out-patients with diabetes mellitus. A prospective study was carried out for a period of one year at tertiary care hospital, Warangal. Data was obtained using different sources and patients were interviewed to identify health related quality of life (HRQOL) using 3 modified questionnaires “SF-36 WHO wellbeing questionnaire, Quality of life enjoyment and satisfaction questionnaire, Diabetes specific quality of life scale questionnaire”. These modified questionnaire includes domains like emotional wellbeing, functional wellbeing, physical wellbeing, social/family wellbeing, diabetic specific goals and satisfaction on blood glucose values, burdens and restrictions from diabetes and its treatment. RESULTS: In the present study, the HRQOL is categorised as high, moderate and low. Overall patients are 325, amongst them 260 were adults and 65 were geriatrics further 152 were male, 173 were female. In reference with WHO, 70% of the adults, 5% geriatric patients’ had a HRQOL below average. 40% geriatrics shared moderate HRQOL and 23% adults, 57% geriatrics shared low HRQOL. Based on enjoyment and satisfaction scale 88% adults, 63% geriatrics shared high HRQOL. In reference with Diabetic Specific scale 97% adults and 95% geriatric patients shared good value. CONCLUSIONS: Domains of HRQOL of diabetic patients was found to be affected moderately so it requires careful management of Diabetes Mellitus. Self-perceived health status was the main predictive factor influencing the overall HRQOL.

PDB38 PSYCHOMETRIC PROPERTIES OF THE CHINESE VERSION OF PROBLEM AREAS IN DIABETES SCALE (SG-PAID-C) AMONG HIGH-RISK POLYPHARMACY PATIENTS WITH UNCONTROLLED TYPE 2 DIABETES IN SINGAPORE

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OBJECTIVES: Undetected diabetes distress is a cause of concern. However, the lack of validated questionnaire is a barrier to screen for diabetes distress. The aim of this study was to examine the validity and reliability of the Chinese version of Problem Areas in Diabetes Scale (SG-PAID-c) and its association with socio-demo-graphic and clinical parameters in patients with type 2 diabetes. METHODS: This cross-sectional study was conducted in four outpatient healthcare institutions in Singapore. Chinese-speaking patients with uncontrolled type 2 diabetes, polypharmacy, and multiple co-morbidities were administered SG-PAID-c and a European Quality of Life-5 Dimensions (EQ-5D) questionnaires as quality of life measures. The factorial construct, convergent validity, and internal consistency of SG-PAID-c were evaluated. RESULTS: The exploratory factor analysis resulted in a three-factor structure of SG-PAID-c with subscales on emotional- and management-related problem (11 items), ability to cope with diabetes problem (3 items) and support-related problem (2 items). The findings also showed good model fit in the confirmatory factor analysis and provided support for the construct and convergent validity of SG-PAID-c. Overall, the internal consistency of SG-PAID-c was good (Cronbach’s α = 0.900). Gender and duration of diabetes were positively associated with 16-item SG-PAID-c while age and type of antidiabetic agents were inversely associated with 16-item SG-PAID-c (p < 0.05). CONCLUSIONS: The 16-item SG-PAID-c is a valid and reliable instrument for use among patients with diabetes in Singapore. Future studies on its clinical utility should be conducted.

PDB39 INCREASING TRENDS OF HEALTH RELATED QUALITY OF LIFE AWARENESS FOR DIABETIC CARE AMONG INDIAN SCIENTISTS

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OBJECTIVES: The health related quality of life (HRQoL) focused research in developing countries is scanty and far between, where 80% of healthcare cost is borne by the patient. Indian patients have different social, socioeconomic and personal goals and satisfaction on blood glucose values, burdens and restrictions from diabetes and its treatment. It is recommended for the Indian context.

PDB40 MARKETING SITUATION AND MEDICAL REFORM POLICY ANALYSIS OF ORAL HYPOGLYCEMIC DRUGS IN CHINA

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OBJECTIVES: To analyze the current marketed hypoglycemic drugs in China, and explore the effect of new medical reform policies on hypoglycemic drugs. METHODS: collect the registration information of oral hypoglycemic drugs from the official website of CFDA, statistical analyze the variety and the insurance situation of the drugs. RESULTS: There were 9 categories of oral hypoglycemic agents in Chinese market, including 27 chemical drugs (including 9 different dosages) which provided 772 domestic manufacturers and 30 abroad manufacturers, and 26 traditional Chinese medicines (TCMs) which provided by 79 domestic manufacturers. Totally 22 hypoglycemic drugs were involved in the national medical insurance list, including 13 chemical ones and 9 TCMs. Among them, only 7 hypoglycemic included in the new medical reform policies, including 5 chemical drugs and 2 TCMs, including Glyburide, glipizide, glimepiride, metformin, acarbose, Xiaoekwan, Shenqi jiangtang particles. CONCLUSIONS: Oral hypoglycemic chemical agents can basically ensure domestic need of diabetes therapy. In the field of anti-diabetic therapy, traditional Chinese medicines occupied a certain market. The implementation of national essential medicines system and medical insurance policy meet the basic need of diabetic patients to some extents, but more coverage and reimbursement were needed in the increasing population and burden of diabetic patients.

PDB41 STUDY OF PRESCRIBING PATTERN OF ANTI-DIABETIC DRUGS IN NEWLY DIAGNOSED TYPE 2 DIABETES MELLITUS

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OBJECTIVES: To study the prescribing pattern of anti-diabetic drugs in newly diagnosed type 2 diabetes mellitus (T2DM) patients. METHODS: Retrospective observational study, carried out in a south Indian tertiary care teaching hospital. Institutional ethics committee approval was obtained prior to the study. As per the study criteria, data of newly diagnosed T2DM patients admitted during the year 2013 and 2014 was collected from medical records department (MRD) registry using ICD code E 11.9. Drug utilization was measured as DDD/1000 diabetic patients/day. RESULTS: During the study period total 662 patients were newly diagnosed with T2DM. The age mean study population was 25.2 ± 12.5 years (mean±SD) and 64.5% of patients were male. 164 patients had over weight and 67 patients were obese. Generalized weakness (n=89), fatigue (n=70) and polyuria (n=41) were the most common symptom present at the time of diagnosis. Among the study population 39.4% patients received single anti-diabetic drug, 29.3% patients received dual anti-diabetic and 17.8% patients received multiple anti-diabetic drug treatment. 39.9% patients received only oral anti-diabetic drugs, 18.6% patients received only insulin therapy, while 28.1% patients received combination of oral anti-diabetic drugs and insulin therapy. Consumption of insulin was 4.1 DDD/1000 diabetic patients/day in 2013, which was increased to 6.3 DDD/1000 diabetic patients/day in 2014. Among the oral anti-diabetic drugs biguanides (58.2%) was the most common prescribed, followed by sulfonylureas (29.3%) and alpha-glucosidase inhibitors (5.4%). Combination of biguanides and insulin was prescribed in 29.6% patients. A significant increase in anti-diabetic drug consumption trend was observed in the highest both in 2013 and 2014 (2.7 DDD/1000 diabetic patients/day), whereas consumption of sulfonylureas was decreased from 1.8 DDD/1000 diabetic patients/day in 2013 to 1.6 DDD/1000 diabetic patients/day in 2014. CONCLUSIONS: This study reveals that insulin and metformin was the most prescribed anti-diabetic drug in our hospital.

PDB42 HEALTH CARE DIRECT COST BURDEN OF DIABETES IN MEDICARE BENEFICIARIES WITH OBESITY