Translation, adaptation and validation of the diabetes distress scale for Indonesian diabetic outpatients with various types of complications

Arifin, B.; Perwitasari, D.; Atthobari, J.; Cao, Q.; Krabbe, P. F.; Postma, M. J.

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EQ-5D scoring in Japan. A visual analog scale (VAS) score and health index score were computed, and the difference was measured against participants (selected by propensity score matching). This study uses linear regression models to determine the change in EQ-5D score, controlling for age, gender, A1C, LDL, body mass index (BMI), duration, comorbidity, and severity. RESULTS: There is an important interaction with the EQ-5D index group score (P = 0.09), compared with the non-P4P group after controlling for patient factors. The between-group difference in the EQ-5D VAS score is not significant after controlling for matched patient characteristics (P = 0.3). CONCLUSIONS: There is no difference in health status and health-related quality of life among patients participating in the newly featured P4P program versus non-participants.

PDB32

PREFERENCES FOR TREATMENT ATTRIBUTES OF DULAGLUTIDE AND LIRAGLUTIDE AMONG PATIENTS WITH TYPE 2 DIABETES MELLITUS IN JAPAN

Ono Y1, Kagei Y2, Kobayashi M3

1Kissei Pharmaceutical, Osaka, Japan; 2Kissei Pharmaceuticals, Osaka, Japan; 3Kissei Pharmaceutical Corporation, Japan

OBJECTIVE: To compare preferences for treatment features of dulaglutide and liraglutide among patients with type 2 diabetes mellitus (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 medica-

EQUATIONS of the target population comprised type 1 diabetics and type 2 diabetes mellitus (T2DM). Due to differences in the age distribution of these groups were compared on SF-36v2 scores, including both positive and negative health-related quality of life measures (mental and physical component summary scores (MCS & PCS)). The sample was divided into three categories of BMI: underweight (BMI < 25), normal weight (BMI 25-29.9), and overweight (BMI ≥ 30). The main outcome was differences in mean health status scores between patients with T2DM and those with normal weight.

METHODS: Two discrete-choice experiments (DCE) were conducted in Japan and the UK among patients with type 2 diabetes mellitus who had not previously self-administered injectable medication. These DCEs were conducted through in-person interviews and examined six attributes: dosing frequency, blood sugar (HbA1c), change weight, type of delivery, type of injection and frequency of nausea. Utility values were estimated using logit regression models and used to calculate relative importance (R) values for each attribute. Prior to completion of the DCE, participants were queried about willingness to self-inject medication for T2DM. Following the DCE, the participants were asked their willingness to take medication represented by dulaglutide and liraglutide medication profiles. RESULTS: Final analytic samples consisted of 182 participants in Japan and 243 from the UK. In both studies, dosing frequency of delivery system, and frequency of nausea were the top three most important attributes, in rank order, with minor variation in the relative importance of each attribute across countries. Pre-study willingness to take injectable medication was significantly lower in Japan (1.7%) compared to the UK (37.9%) (P < 0.001). Post-DCE willingness to take medication represented by dulaglutide and liraglutide medication profiles also differed, with fewer Japanese participants ‘somewhat willing’ or ‘very willing’ (dulaglutide: 42.9%; liraglutide: 4.4%) compared to their UK counterparts (dulaglutide: 30.5%). Post-DCE willingness of RI for treatment characteristics of dulaglutide and liraglutide were similar across countries with dosing frequency ranked highest, followed by type of delivery system. Patients from both countries were more willing to self-inject at the end of the study, UK patients were more willing than Japanese patients at both time points.

PDB35

EFFECTIVENESS OF SELF-MONITORING OF BLOOD GLUCOSE (SMBG) IN REDUCING HbA1C OF DIABETES MELLITUS TYPE-2 PATIENTS IN JAKARTA, INDONESIA: PRELIMINARY FINDINGS

Indriyatni S1, Thambhan Y1, Sari K1, Yulianti V1, Hamkur H2

1Universitas Insan Kita, Surakarta, Indonesia; 2Universitas Indonesia, Jakarta, Indonesia

OBJECTIVES: Indonesia could lose as much as US$93 billions due to diabetes between 2006-2015. The prevalence of DM patients was 6.9 million people in 2010 and it is predicted to reach 11.9 million people in 2030. This study aimed to assess the importance of self-monitoring of blood glucose (SMBG) in reducing HbA1c among DM patients in Jakarta.

METHODS: This study was conducted in 394 DM patients who were continuously insured for blood supply of insulin, and having HbA1c of 9% or above, and were included on the program for 6 months. The inclusion criteria is the patient is assumed to be able to contribute for better outcome of treatment. We conducted a quasi experiment with 24-week observation after initial insulin therapy and follow-up visits every 4 weeks. Data analysis was done using SPSS version 20. RESULTS: Total of 186 respondents, 64 were returned (response rate 35%). Majority (n=112, 60.8%) of respondents were between 46-55 years. Male gender was dominating (n=204, 56.6%) with 323 (88.7%) were married. Majority of respondents were from urban locality 269 (73.9%). Majority of respondents (80.2%) were educated but majority (n=168, 46.2%) were having no job. A large number of respondents had diabetes for more than 12 years (n=152 42.4%) and had poor practice of DM foot care. Demographic characteristics Locality, Level of education, Occupation and income (p < 0.001) had statistically significant association with knowledge and practice score. CONCLUSIONS: The result of study shows adequate knowledge and poor practice among diabetic patients regarding foot care, betterment of knowledge is necessary to enhance overall practice and to reduce diabetes foot complications.

PDB36

TRANSLATION, ADAPTATION AND VALIDATION OF THE DIABETES DISTRESS SCALE FOR INDONESIAN DIABETIC OUTPATIENTS WITH VARIOUS TYPES OF COMPLICATIONS

Evans C1, Periwitsari D2, Athabhataj 3, Cao QT4, Krabbe PP5, Postma MG3

1University of Groningen the Netherlands, Groningen, The Netherlands; 2University of Ahmad Daulah Yogyakarta, Yogyakarta, Indonesia; 3Medical Faculty, Universitas Cadijah Muda, Yogyakarta, Indonesia; 4University of Groningen, Groningen, The Netherlands; 5University of Groningen, University Medical Center Groningen, Groningen, The Netherlands

OBJECTIVES: To assess the diabetes distress (DDD) in a large number of Sudanese diabetic individuals with different complications in a large urban community. METHODS: A cross-sectional study was conducted in 1823 Sudanese diabetic patients (1277 type 2 and 546 type 1, age 25-80, duration of diabetes ≥ 5 years) including patients with cardiovascular diseases, nephropathy, and blindness complications. Patients were recruited from diabetes clinics and out-patient departments of four teaching hospitals in Khartoum, Sudan. The total sample consisted of 1823 participants. The Arabic version of the DDS was adapted and validated by using the same approach as that of the Dutch version. The Arabic DDD was translated by a bilingual medical person. A forward and backward translation process was conducted. The translation process was checked by two other bilingual medical persons. The patients were asked to fill a questionnaire including the Arabic DDD and two other SF-36v2 scales (MCS and physical health component summary score (PCS)). The Arabic DDD was then tested for reliability and validity using the Arabic SF-36v2 scales (MCS and PCS). Reliability was assessed by internal consistency using Cronbach’s α. Validity was assessed for face validity and construct validity. RESULTS: The questionnaires were filled by 1823 Sudanese patients with diabetes (1277 type 2 and 546 type 1) including patients with cardiovascular diseases, nephropathy, and blindness complications. Patients were recruited from diabetes clinics and out-patient departments of four teaching hospitals in Khartoum, Sudan. The total sample consisted of 1823 participants. The Arabic version of the DDD was adapted and validated by using the same approach as that of the Dutch version. The Arabic DDD was translated by a bilingual medical person. A forward and backward translation process was conducted. The translation process was checked by two other bilingual medical persons. The patients were asked to fill a questionnaire including the Arabic DDD and two other SF-36v2 scales (MCS and PCS). The Arabic DDD was then tested for reliability and validity using the Arabic SF-36v2 scales (MCS and PCS). Reliability was assessed by internal consistency using Cronbach’s α. Validity was assessed for face validity and construct validity.
OBJECTIVES: To translate, adapt and validate the Diabetes Distress Scale (DDS) instrument for use in Indonesia. The DDS is a short 16-item scale from the HOQoL, which cannot be directly extrapolated to Asian populations. This study was conducted to make an assessment of the trends in HRQoL research in patients with diabetes in India and Asia vis-à-vis the western population. METHODS: We performed literature searches in PubMed, Clinicaltrials.gov and country-specific registries for 1985–2016 to identify studies investigating HRQoL in patients with diabetes and compared these for those with the US and the UK. RESULTS: Only 46 publications were identified from the four countries by Malaysia, which contributed only 3.8, 2.5 and 2.0% of that published from USA. The contribution from Bangladesh, Pakistan, Indonesia, Philippines, Sri Lanka and Thailand was negligible. The increasing sensitivity of Indian scientists towards QoL was evident from the increasing number of publications over the years. The number of papers published for the Indian populations increased from 2 in 1991-95 and 1996-2000, 4 in 2001-2005 and 7 in 2006-2010 to 31 in 2011-2016. Similar trends were also observed in other Asian countries, including China, South Korea, Japan and Australia. The USA and UK employed generic HRQoL tools, viz. EQ-5D, SF-36, SF-12 and SF-6D. The diabetes specific assessment tools like ADDQoL were used very sparsely. A QoL tool (Quality of Life Instrument for Indian Diabetes patients, QoLIID) specific for Indian patients with diabetes has also been developed. The research into the humanistic burden of diabetes is being increasingly recognized worldwide, including in Asian countries such as India, and may be expected to improve patient care.

DIABETES/ENDOCRINE DISORDERS – Health Care Use & Policy Studies

PDB40
MARKETING SITUATION AND MEDICAL REFORM POLICY ANALYSIS OF ORAL HYGROLYMIC DRUGS IN CHINA
Long F1, Zhou N2, Yang N1, He M2, Zhou L2
1School of Pharmaceutical Science, Huazhong University of Science and Technology, Wuhan, China; 2Sichuan University, Chengdu, China
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 websites. A descriptive analysis was done on the frequency and the trend 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 list of new medical reform policies in 2016, including Glyburide, glipizide, glibenclamide, metformin, acarbose, Xiaokewan, 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 need for the increasing population and burden of diabetic patients.

PDB41
STUDY OF PRESCRIBING PATTERN OF ANTI-DIABETIC DRUGS IN NEWLY DIAGNOSED TYPE 2 DIABETES MELLITUS
Merry R1, Vijayanarayana K1, Girish T1, Nair S1, Karthik Rao N2
1Pharmacy Practice, Manipal College of Pharmaceutical Sciences, Manipal University, Manipal, Karnataka State, India; 2Dept. of Medicine, Kasturba Medical College, Manipal University, Manipal, India
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 E11.9. Drug utilization was measured as DDD/1000 diabetic patients/day. RESULTS: During the study period total 662 patients were newly diagnosed with T2DM. The mean age of the study population was 52.5 ± 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 drug 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 to 1.5% patients. Among the oral anti-diabetic drugs the combination of metformin was 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
HEALTHCARE DIRECT COST BURDEN OF DIABETES IN MEDICARE BENEFICIARIES WITH OBESITY

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