EQ-5D scores were computed, and the change in the EQ-5D score was measured in participants (selected by propensity score matching). This study uses linear regression models to determine the change in the EQ-5D score, controlling for age, gender, A1C, LDL, body mass index (BMI), duration, comorbidity, and severity. **RESULTS:** There is an insignificant increase in the EQ-5D index score of the PDB31 group (0.095 [95% CI; P = 0.95]), compared with the non-P4P group after controlling for patient factors. The between-group difference in the EQ-5D score was not significant after controlling for patient factors. **OBJECTIVES:** 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.

**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 assess health care costs and productivity losses associated with hypoglycemia in type 1 and type 2 diabetic patients per person and for Austria. **METHODS:** The target population comprised type 1 diabetics and type 2 diabetics who were treated at one of the study sites during the study period. An Internet-based self-reported survey administered of individuals 18 and older. **RESULTS:** Data gathered from April to September 2015. Pretested questionnaire was used to assess the knowledge and practice of diabetic patients regarding foot care. The knowledge and practice score of patients was classified by adequacy. Poor agreement was found between the questionnaire and actual behaviour. **CONCLUSIONS:** Knowledge deficit is considerable among patients.

**PDB31:**
**HIGHER WEIGHT, HIGHER BURDEN: OUTCOMES OF ADULTS IN JAPAN WITH TYPE 2 DIABETES**

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**OBJECTIVES:** To determine the change in the EQ-5D score, controlling for age, gender, A1C, LDL, body mass index (BMI), duration, comorbidity, and severity. **RESULTS:** There is an insignificant increase in the EQ-5D index score of the PDB31 group (0.095 [95% CI; P = 0.95]), compared with the non-P4P group after controlling for patient factors. The between-group difference in the EQ-5D score was not significant after controlling for patient factors. **OBJECTIVES:** 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 DULAGLUITIDE AND LIRAGLUITIDE AMONG PATIENTS WITH TYPE 2 DIABETES MELLITUS AND THEIR WILLINGNESS TO SELF-JECT DIABETES MEDICATION: A COMPARISON BETWEEN JAPAN AND THE UNITED KINGDOM**

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**OBJECTIVES:** To compare preferences for treatment features of dulaglutide and liraglutide among type 2 diabetes patients (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, hypoglycemia frequency, and hypoglycemia severity. **RESULTS:** Preference utilities 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, 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 self-management and frequency of hypoglycemia were the two 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%) (P < 0.0001). Post-DCE willingness to take injection 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%). Future research will focus on examining the impact 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.

**PDB33:**
**EFFECTIVENESS OF SELF-MONITORING OF BLOOD GLUCOSE (SMBG) IN REDUCING HBA1C OF DIABETES MELLITUS TYPE-2 PATIENTS IN JAKARTA, INDONESIA: PRELIMINARY FINDINGS**

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**OBJECTIVES:** Indonesia could lose as much as US$93 billion due to diabetes between 2005-2015. The prevalence of DM patients was 6.9 million people in 2010 and will increase 168 million people in 2030. The study was conducted in two government hospitals and general population of diabetes patients. **RESULTS:** There is an 18.5% beta and significant level of 5% alpha. The inclusion criteria is the patient is at least 18 years old with DM for at least for 24 week-observation. **CONCLUSIONS:** The preliminary result of 42 patients shows that 92.9% of patients had decreased significance asso-
OBJECTIVES: To translate, adapt and validate the Diabetes Distress Scale (DDS) instrument for type 2 diabetes mellitus (T2DM) patients 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 of maximal 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 domains. The instrument form resulting from this study was labeled DDS17 Basha 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 maxim likelihood estimations, distress, self-management distress, and regimen distress. The internal consistency for the four domains ranged from 0.78 to 0.83. CONCLUSIONS: The DDS17 Basha Indonesia provides a valid and reliable scale for assessing distress of Indonesian T2DM outpatients. The use of this instrument in future research and clinical trials is recommended for the Indonesian context.

PD387 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 related to health related quality of life in type 2 diabetes mellitus patients in representative sample population. METHODS: The study consisted of a representative population sample of 325 out-patients with diabetes mellitus enrolled prospectively 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, among them 260 were adults and 65 were geriatrics further 152 were male, 173 were female. In reference with WHO cut-off value, 9 adults, 3 geriatrics had moderate HRQOL and 23 adults, 23 geriatrics had low HRQOL. Based on enjoyment and satisfaction scale 88% adults, 63% geriatrics shared moderate HRQOL and 23% adults, 57% geriatrics shared low HRQOL. CONCLUSIONS: The health related quality of life is poor among diabetes mellitus patients and the study reveals that patient’s condition is mainly affected moderately so it requires careful management of Diabetes Mellitus. Self-perceived health status was the main predictive factor influencing the overall HRQOL.

PD388 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 screening 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-demographic 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 alpha = 0.900). Gender and duration of diabetes were positively associated with 16-item SG-PAID-c while age and type of antidepressant 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.

PD389 INCREASING TREND 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 factors which can lead to different findings from the western populations and can possibly not 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 with data for diabetes patients in the US and the UK. RESULTS: Only 46 publications were identified from the search from India (5 publications by Malaysia (0.5%), which is less than 1% of the number of papers published in the US and the UK. The diabetes specific assessment tools like ADDQoL were used very sparsely. A QoL tool (Quality of Life Instrument for Diabetes patients, QOLID) specific for Indian patients with diabetes has also been developed (5 in India, 2 in Malaysia). The results of this study revealed that 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

PD400 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 the National Food and Drug Administration to analyze the variety and therapeutic 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 variety of pre and post medical insurance, 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 for the increasing population and burden of diabetic patients.

PD414 STUDY OF PRESCRIBING PATTERN OF ANTI-DIABETIC DRUGS IN NEWLY DIAGNOSED TYPE 2 DIABETES MELLITUS PATIENTS

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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 were 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 ± 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 oral anti-diabetic drugs, 18.6% patients received 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 39.4% patients. Combination of anti-diabetic drugs results in interaction of metformin with highest both in 2013 (4.2 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.