(48%), and energy/activity level (36%) for Physical, juvenilization (51%) and teasing/ bullying (48%) for Mental and self-confidence (46%) and anxiety (47%) for Emotions. Emotional and social impacts were often related to others’ perception or treatment of the child as younger, and all impacts were moderated by physical growth. Additionally, children who began treatment later in life experienced more emotional and social impacts as children who started at an earlier age, and caregivers reported consistent symptoms/impacts. Modifiers to the degree of impact of GHD were identified and include age at treatment, growth velocity, and having a history of childhood obesity with GHD. Responders did not differ substantially among countries. CONCLUSIONS: Concept elicitation of the burden of disease for children with GHD identified key concepts that should be included in PRO/ObsRO measures to assess the impact of GHD and treatment.

**PDDB1**

**OBJECTIVE:** To identify and compare the health outcomes profiles of adults receiving medical care at specialty clinics for symptomatic (chronic pain) and largely asymptomatic (diabetes) chronic conditions. METHODS: Respondents receiving care at pain or diabetes clinic completed the PROMIS-29 instrument that measures 7 health domains. Item response theory-based scores are on the 7-metric with a mean of 50 and standard deviation (SD) of 10 based on the general United States population (norm). RESULTS: A total of 227 patients participated in the study (n=128 chronic pain; n=99 diabetes). The mean age was 46.7 years (SD=13.7), 56% were women, 48.6% non-Hispanic White, and 31.2% had ≥12 years of education. Pain clinic patients were significantly older and less educated than diabetes clinic patients, however there were no other demographic differences between patient groups. All 7 domain scores were statistically significantly worse for the chronic pain clinic patients compared with diabetes clinic patients (P<0.001 for all comparisons). The smallest and largest differences between clinics were observed for anxiety (mean difference 17.7) and pain interference (mean difference 22.0), respectively. Adjustment for age, sex, and education only slightly attenuated differences between the two patient populations. For example, the unadjusted mean difference between diagnostic groups for physical function was 17.7 (P<0.001), while the mean difference was 16.9 (P<0.001) when adjusted for pain interference and the SF-36v2 mental component summary (MCS) score had mean scores that were 0.9 to 1.7 SDs worse than the norm on all domains. CONCLUSIONS: Compared with patients with diabetes, chronic pain clinic patients had a substantially poorer PROMIS-29 health outcome profile. Findings indicate that not only are health outcome profiles for chronic pain patients poor relative to the US population, but also poor relative to patients with a different chronic but relatively asymptomatic condition (diabetes) suggesting that aversive symptoms may have a more significant impact than chronic disease per se.

**PDDB2**

**OBJECTIVE:** To utilize the SF-36v2 mental component summary score to describe mental well-being experienced by patients with type 2 diabetes. METHODS: Data were from the 2013 United States National Health and Wellness Survey (NHWS), an annual survey of ≥18 year old participants about their health status, physical activity, and health care through self-administered, Internet-based questionnaires. The analytic sample included those self-reporting a type 2 diabetes diagnosis. Mental well-being was defined by utilizing the SF-36v2 MCS. Based on the normative mean of 50 and standard deviation (SD) of 10 for the general population and the distribution of MCS scores within the analytic sample, categories were defined as good mental well-being (above the population mean, MCS ≥50), poor mental well-being (≤1 SD below the population mean, MCS >40 and ≤50), and very poor mental well-being (≤1 SD below the population mean, MCS<40). RESULTS: The analytic sample consisted of 7852 respondents diagnosed with T2D. Of these, 22% (n=1781) experienced very poor mental well-being, 23% (n=1781) poor mental well-being, and 56% (n=4370) good mental well-being. Very poor/poor mental well-being was associated with respondents who were younger, female, non-white, less educated, current smokers, and had lower household income (p<0.001 for all). Respondents with very poor/poor mental well-being vs. good mental well-being had greater Charlson Comorbidity Index scores (mean 1.99 vs. 1.59), and were more likely to be diagnosed with depression (57%/26% vs. 5%) or an anxiety disorder (44%/20% vs. 5%) (p<0.001 for all). Poorer mental well-being was also associated with a shorter amount of time T2D for a shorter period of time, use of insulin, experience with hypoglycemia, and greater likelihood of T2D related complications (p<0.001 for all). CONCLUSIONS: Poorer mental well-being, as measured by the SF-36v2 MCS, is associated with greater overall physical and psychiatric morbidity, as well as morbidity specifically associated with T2D.

**PDDB3**

**OBJECTIVE:** To delineate the incremental burden of obesity and sleep disorders among individuals with type 2 diabetes mellitus. METHODS: Data were from the 2013 United States National Health and Wellness Survey (NHWS), a nationally representative, online survey of 71,157 adults ≥18 years. Respondents with T2DM were categorized in 4 groups: T2DM only, T2DM with obesity, T2DM with SD, T2DM with obesity and SD. Respondents provided information on health status (SF-36v2: mental and physical component summary (MCS, PCS) and SF-6D (health utility scores)), symptoms (Work Productivity and Activity Impairment questionnaire) and healthcare utilization in the past 6 months. Multivariable analyses were performed to adjust for these variables (e.g., age, gender, education, household income, insurance status, comorbidity burden, etc.) RESULTS: Among respondents with T2DM only, 7,066 (39.5% female; 60.0 years), 63.0% were obese, 23.0% had SD, and 17.4% had obesity and SD. Multivariable analyses showed significantly lower health status and greater productivity loss and healthcare utilization among respondents with T2DM and SD vs. T2DM only (p<0.001 for all). CONCLUSIONS: Majorities of respondents with T2DM and SD were obese, suggesting a strong link between obesity and SD. Coexistence of obesity and SD is associated with significant impact on health status, productivity, and healthcare utilization in patients with T2DM. Interventions focusing on SD and obesity may be clinically and economically beneficial.
BACKGROUND: Previous findings regarding the effect of depression treatment and its co-morbidities on health related quality of life (HRQoL) of adults with diabetes were inconsistent and targeted certain groups of population. Therefore, there is a critical need to perform a study that focuses on a general population with diabetes and depression. OBJECTIVES: The primary aim of this study is to examine the effect of depression treatment and its co-morbidities on HRQoL. MATERIAL AND METHODS: Data from the National Ambulatory Medical Care Survey (NAMCS) 2006-2010 were used to evaluate the association between depression treatment categories and HRQoL measures. In the adjusted analysis, we controlled for socio-demographic factors, lifestyle risk factors, other chronic conditions, and the baseline HRQoL measure. RESULTS: A strong association between depression treatment and physical HRQoL measure in both unadjusted and adjusted models. Amended adults who received psychotropics (with or without antidepressants) reported a near good health compared to those without depression treatment (adjusted OR = 2.32, 95% CI = 1.01, 5.34). For mental HRQoL, no significant differences were observed between treatment groups in the adjusted model. CONCLUSIONS: Depression treatment, especially psychotropics (with or without antidepressants) may improve physical HRQoL.

DIABETES/ENDOCRINE DISORDERS – Health Care Use & Policy Studies

PDB89 MULTIVARIATE ANALYSIS OF PRESCRIBING INFORMATION FOR NEXT GENERATION TYPE 2 DIABETES TREATMENTS
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OBJECTIVES: To compare the pivotal clinical endpoints on the prescribing information labels of next generation treatments for type 2 diabetes (T2D) and to identify the most clinically-relevant antidepressant outcomes. This multivariate analysis was designed to identify the most important antidepressant endpoints for the management of patients with T2D, based on symptomatology and relative efficacy. METHODS: A multivariate analysis of clinical efficacy endpoints from product information labels of 10 recently approved next generation treatments for adult T2D was undertaken. RESULTS: psychiatric symptoms including change from baseline in hemoglobin A1c (%), body weight (kg), fasting plasma glucose (mg/dL), post-prandial plasma glucose (mg/dL), and the incidence of hypoglycemic events (%). Clinical relevance for this analysis was defined as a 1% reduction in HbA1c, 5kg reduction in mean body weight from baseline, and an incidence of hypoglycemia <1%. Data with metformin in combination therapy was included where available, based on current therapeutic guidelines. RESULTS: The multivariate analysis highlighted the no single endpoint met the predefined hypothesis of clinical relevance after 26-weeks of treatment. Canagliflozin 300mg / metformin (-1.06%) and liraglutide (-1.00%) reported the greatest reduction in HbA1c. Canagliflozin 300mg (-0.7%) and liraglutide (-0.4%) met the metformin (2.86%) had the highest mean reduction in body weight from baseline. Liraglutide 5mg / metformin (0.60%) and dapagliflozin 10mg / metformin (1.10%) had the highest incidence of hypoglycemia. CONCLUSIONS: Physicians should consider all clinically-relevant outcomes of available T2D therapies with individual patient needs before initiating treatment. Clinicians must be aware of the various clinical outcomes for available therapies to ensure a safe and effective treatment regimen based on the symptoms and profile of individual patients. A triple-goal targeted approach to the management of T2D may reduce healthcare costs and treatment augmentation while improving quality of life for patients.

PDB80 MEDICATION USAGE PATTERN FOR PAIN MANAGEMENT AMONG INDIVIDUALS WITH TYPE 2 DIABETES
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OBJECTIVES: To describe medication usage patterns for pain management among individuals with type 2 diabetes (T2DM) diagnosed between 2010 and 2015. METHODS: Data from 2 US claims databases were used to identify all prevalent users of diabetes-related ambulatory visits among patients with T2DM. Bivariate chi-square analysis and multiple logistic regression were performed to evaluate the factors associated with prescriptions to medications (e.g., antidepressants, anticonvulsants, opioids, and topical agents). RESULTS: Prescription prevalence rates for treatment of chronic pain among individuals with T2DM are presented. CONCLUSIONS: These findings highlight the need for more clinical research in this population on the treatment of chronic pain among people with diabetes. Further research is also necessary to determine the effectiveness of anticonvulsants as an alternative treatment for chronic pain.

PDB88 PRESCRIBING PATTERN, GUIDELINE ADHERENCE AND DIABETES MELLITUS MANAGEMENT WITH CO-MORBIDITIES: A MALAYSIAN HOSPITAL PERSPECTIVE
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OBJECTIVES: To evaluate the prescription pattern, adherence of prescribers with Clinical Practice Guideline 2009 and management of diabetes mellitus (DM) with co-morbidities in a tertiary-care hospital, Pinang General Hospital Malaysia. METHODS: Cross sectional study, data were performed on 30% of all prescriptions written by the same prescribers (20 prescriptions for each prescriber). All 1020 DM patients were suffered with other co-morbidities. All of the prescriptions were divided into two different groups of adherent and non-adherent prescriptions. Self-administered research tools were used and demographic characteristics of the patients were determined by descriptive statistics. Data was analyzed by using SPSS 21.0. Comparison between adherent and non-adherent groups was done using Chi square tests. RESULTS: PRESCRIBING PATTERN: in all prescriptions, reaction rates of physician adherence was seen with respect to the recommendations of CPG 2009. A statistically significant negative association (Ф = 0.94, p-value=0.003) was observed between DM management and co-morbidities. CGP adherence had shown statistically weak negative association (Ф = 0.081, p-value=0.010) with patients having co-morbidities. No statistically significant association was observed between CPG 2009 adherence and CVD. CONCLUSIONS: The study explored the various aspects of prescribing pattern of physicians, their adherence to the CPG 2009 and the management of DM with other co-morbidities. This study also recognized the need for improvement in prescribers’ pattern of prescription and DM management with co-morbidities.

PDB87 PATIENT BENEFIT-RISK PREFERENCE OF INSULIN TREATMENT: AN EXAMINATION OF HEALTH LITERACY AND BELEIFS AS PREDICTORS OF PREFERENCE AND RISK AVERSION
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OBJECTIVES: The aim of this study was to determine patient benefit-risk preference of insulin treatment, and to examine how preference is predicted by health literacy, sociodemographic status and patients own health risk perception. As a secondary objective weinvestigated whether elicited preferences were sensitive to the presentation of benefits as either a surrogate or clinical health outcome METHODS: This was a questionnaire based study involving Danish type 2 diabetes patients recruited through a diabetes registry. Laboratory- and clinical data on diabetes management and medication use was obtained from the patient. The questionnaire included a section on diabetes management, health literacy, demographics and a discrete choice experiment (DCE). In the DCE, respondents were asked to choose between two unlabelled insulin treatments. These were defined by improvements in glucose control (HbA1c or long-term sequelae risk reduction), weight control, hypoglycemic events (severe/minor) and treatment-related heart attack risk. A Bayesian efficient design (Ngeme e 1.1:2) was used to construct the choice tasks. Logistic regression analysis was used to assess the relationship between risk preferences coefficients derived from this model were used to estimate maximum acceptable risk (MAR) of treatment in return of benefit. RESULTS: One thousand and thirty-three patients completed the questionnaire. Overall, the avoidance of a minor increase in heart attack-risk (3 additional people of 1000) was driving choice of treatment across all versions of the DCE. This was followed by avoiding severe hypoglycemic events. We observe some differences in preference estimates across the DCE versions indicating that patients are sensitive to the presentation of benefits as long-term sequelae risk reduction rather than a surrogate measure of health improvement (HbA1c). Detailed results on subgroup analysis and predictors of preference are presented at the conference. CONCLUSIONS: Risk aversion to heart attack, although it is a minor additional risk, influence patient choice of treatment. Final conclusion is presented at the conference.