

in Malaysia. Undiagnosed and failure to achieve trio Hs treatment goals further increased complication and severity of the chronic conditions. Hyperlipidemia was highly underdiagnosed and efforts are needed to manage these conditions in holistic manner rather than isolation.

#### PDB133

##### TELEMEDICINE COMPARED WITH STANDARD CARE IN TYPE 2 DIABETES MELLITUS. A RANDOMIZED CONTROLLED PROJECT IN AN OUTPATIENT CLINIC

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**OBJECTIVES:** For patients with T2DM does telemedicine, compared with standard care, provide equivalent clinical outcomes? **METHODS:** Forty patients with type 2 diabetes mellitus allocated from October 2011 until July 2012 randomized to either treatment at home by video conferences only or the standard outpatient treatment. Primary outcomes were HbA1c and blood glucose levels and secondary outcomes were 24-h blood pressure, cholesterol levels, and albuminuria. The videotelephone was installed and serviced by the telephone company, TDC, Denmark, as a broadband solution. **RESULTS:** The improvements in the two treatments, given as changes in percent of telemedicine vs. standard, showed significant differences in HbA1c (-15 vs. -11 %), mean blood glucose (-18 vs. -13 %), and in cholesterol (-7 vs. -6 %). No differences in LDL (-4 vs. -6 %), weight (-1 vs. 2 %), diastolic diurnal blood pressure (-1 vs. -7 %), and systolic diurnal blood pressure (0 vs. -1 %) were found. Nine consultations were missed in the standard outpatient group and none in the telemedicine group. **CONCLUSIONS:** The direct comparison of home video consultations versus standard outpatient treatment in T2DM, telemedicine was a safe and superior option in treatment of T2DM with equivalent or better outcome after six months treatment.

#### PDB134

##### EFFECT OF PATIENT-EDUCATION ON HEALTH-RELATED QUALITY OF LIFE OF DIABETIC FOOT ULCER PATIENTS IN A TERTIARY-CARE HOSPITAL

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**OBJECTIVES:** Diabetic foot ulcer (DFU) is the most serious and disabling long term complication of diabetes, adversely affecting the health related quality of life (HRQoL). This study evaluates the impact of patient-education on HRQoL of DFU patients. **METHODS:** This open-labeled randomized controlled study on the effect of patient-education on improvement of HRQoL, conducted in Kasturba Medical College Hospital, Manipal, (coastal South India), consisted of 120 DFU patients with 60 subjects each in the control group [CG] and intervention group [IG]. RAND-36 questionnaire was employed for evaluating HRQoL scores of DFU patients in both groups at baseline and after six months of educational intervention. **RESULTS:** Subjects in the both IG and CG reported poor HRQoL scores, (similar in each group) on all the eight subscales at baseline. But, after six months of educational intervention, HRQoL improved substantially in IG with respect to CG as well as IG at baseline ( $p < 0.05$ ). Likewise, in both CG and IG, the physical component summary scale (PCS) scores ( $22.9 \pm 6.4$  vs  $24.4 \pm 7.6$ ) and the mental component summary scale (MCS) scores ( $26.1 \pm 5.2$  vs  $27.6 \pm 7.3$ ) were similar and poor before educational intervention. However, six months post educational intervention, in IG, the Both PCS and MCS scores increased dramatically from  $24.4 \pm 7.6$  to  $41.8 \pm 8.6$  and  $27.6 \pm 7.3$  to  $47.6 \pm 5.6$  ( $p < 0.05$ ) respectively. **CONCLUSIONS:** The remarkable improvement in the HRQoL in IG at six months follow-up suggests that patient-education significantly improves HRQoL in DFU patients. Overworked physicians and paucity of trained doctors in resource-poor settings obligate task-shifting to non-physician healthcare providers. Educational intervention is an economical and feasible strategy, especially in the context of the ever-increasing burden of non-communicable disease in resource-poor developing world.

#### PDB135

##### BLOOD GLUCOSE TEST RESULT FROM EMPLOYEES AT HEALTH CLINIC OF SONGINO KHAIRKHAN DISTRICT

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**OBJECTIVES:** To give knowledge about diabetes and health, to prevent from diabetes employees at Health clinic at Songino khairkhan district. **METHODS:** Survey card with 12 questions has been given to 50 professionals, staff and employees which was randomly chosen, agreed to fill out survey and who has never been diagnosed with diabetes and working in a shift of health clinic. Blood glucose determination and body mass index tools are defined by medical instruments and apparatus. Survey was carried out from April, 2014 to July, 2014. Research data and results were developed by using the software "SPSS -11.5". **RESULTS:** 9 employees (38%) were 30-39 years of age with an average age of  $38.6 \pm 9$ , and 44 of them were (88%) female and 24 of them were (48%), non-medical professionals, and 32 of them have never been done blood sugar test (64%). **DISCUSSION:** Our research result was related with people's living condition who uses high calorie food because diabetes research of Fukushima, M. & Ogawa, K. (2008) have determined that people in the big cities uses high calorie foods, and rich carbohydrates food and have physical inactivity comparing with people who are living in the countryside. **CONCLUSION:** The average age of respondents were  $38.6 \pm 9$ , and 15 of them were 40-49 years old. (30%) 32 of the employees have never given glucose test before (64%) and 15 of them had (30%) glucose monitored with 7.6. And 20 of them had heavy weight (40%), and 26 of them worked for 24 hours (52%).

#### PDB136

##### IMPORTANCE OF HYPOGLYCEMIA BARRIER ON THE TREATMENT OF DIABETES MELLITUS (DM) – SURVEY WITH TURKISH PHYSICIANS

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**OBJECTIVES:** The purpose of this study was to assess the magnitude of hypoglycemia barrier in terms of physician's treatment choices and algorithm and the impact of hypoglycemia in adherence and persistence to insulin treatment. **METHODS:** Four hundred thirteen Turkish physicians were interviewed by close ended questions with a mix of dichotomous or bounded continuous response formats. Questions were asked face to face in 2 national diabetes congresses, with a physician mix of 75% internists, 23% endocrinologists, 1,9% family physicians and rest pediatricians and obstetrics. **RESULTS:** Within 413 replies on how important is the hypoglycemia barrier to reach the target HbA1c on an importance scale, 95% replied either important or very important. 82% of physicians declared that they would change their target HbA1c, if they were not concerned about hypoglycemia. Similarly, 88% of physicians believed more of insulin-treated patients might reach target HbA1c if physicians are not concerned about hypoglycemia. Among the physicians replied 79% stated that less than 40% of their patients reported their hypoglycemic status. If patients experience hypoglycemia, 75% of physicians would reduce the insulin dose for more than 60% of patients, 85% would stop insulin treatment for less than 20% of patients, 91% would switch to other insulins and 62% would prefer to keep same treatment for less than 20% of the patients. Among the physicians replied, 35% of them declared that patients are willing to stop treatment due to hypoglycemia and more than 50% declared that patient needs a new insulin that causes less hypoglycemia. **CONCLUSIONS:** In this study, physician dimension of hypoglycemia was explored. From the results obtained, it is obvious for the Turkish physicians that hypoglycemia is perceived as a major barrier for the better treatment of the patients. These results show that new treatment options causing less hypoglycemia are needed in the treatment of diabetes mellitus.

#### PDB137

##### AN ANALYSIS OF DIABETIC MEDICINE UTILIZATION IN TURKEY

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**OBJECTIVES:** The rational treatment of all diseases, but especially a chronic disease that have common systemic effects, medium and long-term complications such as diabetes is extremely important. The aim of the study is to understand medicine utilization in type II diabetes in Turkey. **METHODS:** In order to examine this topic, the volume and costs of anti-diabetics, preference rates of the active substances, first prescription behavior of physicians were taken from data base (MEDULA) of Social Security Institution, the government based reimbursement agency of Turkey from year 2007-2014. Descriptive analysis was conducted. **RESULTS:** Consumption of diabetic medicines rose from 638 million TL to 1.116 million TL between 2007 and 2013, respectively. The majority of the increase came from insulin and analogs that rose from 254 million TL to 664 million TL between 2007 to and 2013, respectively. 84,17% of naïve diabetic patients had been started with anti(?) diabetic protocols without insulin in 2013. In additional, metformin was used as 76,24% of all patients in 2013 among them. 65,4% of diabetic patients diagnosed between 40-64 age in 2013. Approximately 70% of all patients were diagnosed by internal physicians in 2013, that ratio seems grooving in recent years. **CONCLUSIONS:** Diabetic medicines are one of the mostly consuming medicines in Turkey. In additional, the consumption of diabetic medicines was rising each every year. Diabetic protocols without insulin or including metformin have the highest percentage of all treatment protocols. Patients were diagnosed with internal physicians while it was expected as family physicians depending on clinical guidelines. The analysis may be a guide for policymakers to understand how the diabetes is managing in Turkey.

#### PDB138

##### CLINICIAN-REPORTED INSIGHTS OF INSULIN DEGLUCED USE IN GERMANY AND FOUR SUPPORTING EUROPEAN COUNTRIES

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**OBJECTIVES:** Insulin degludec (IDeg) is a long acting basal insulin analogue used once-daily in patients with Type 1 and Type 2 diabetes and was approved for use in Europe in 2013. A survey among clinicians was conducted to understand the initial real world experience from prescribing IDeg. **METHODS:** Clinicians with experience of prescribing IDeg in Germany, Sweden, Luxembourg, Switzerland and United Kingdom were invited to answer a short questionnaire in four waves. Collected data reflected the type of patients using IDeg, and the realised benefits of treatment including reductions in insulin dosing. Patients were not identifiable, and responses were anonymised, and qualitative or quantitative analyses used where appropriate. **RESULTS:** In total, 226 clinicians (n) representing 3,083 patients (pts) responded. In Germany (n=201), clinicians reported a slight preference to use IDeg for patients with T2DM versus patients with T1DM (34.5% versus 25.5% respectively, with 35.5% stating T1DM and T2DM). Overall, reported clinical benefits included improvement in blood glucose control (n=93, pts=1440), flexibility for patients (n=69; pts=1072) and reduced risk of hypoglycaemia (n=55, pts=939). Switching to IDeg allowed dose reductions in most patients (44% (n=100) of clinicians representing 55% (n=1690) of patients). Overall, 74% of clinicians (n=168; pts=1,856) reported the flexible dosing schedule had a positive impact on patients. **CONCLUSIONS:** These early findings in Germany and other European countries confirm the results from IDeg randomised clinical trials and indicate real world experience with IDeg is positive for both clinicians and patients by adding valuable treatment benefits.

#### PDB139

##### CURRENT CLINICAL PRACTICE CORRESPONDENCE WITH TREATMENT GUIDELINES IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

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