OBJECTIVES: To evaluate the health care costs for the management of diabetes alongside other co-morbidities before and after counseling. METHODS: A Prospective interventional study was conducted in the community setup of Warangal, India for a period of four months. Only the educated Diabetic patients with other comorbidities were enrolled in the study. The data collected were cost of medical consultation fee, transportation cost. The average total health care cost was calculated based on the previous two months expenses of each patient before and after counseling. RESULTS: A total of 100 patients were evaluated in the study period. Out of 100 patients, majority were in the age group of 41 to 50 years (66 persons) and men (63%) followed by women (37%). Most of the patients were diabetes with hypertension, dyslipidemia. The average cost of medications per patient Rs. 1540.72 (81.2%), the average laboratory consultation fee per patient Rs. 350.14 (16.55%), the average doctors consultation fee per patient Rs. 175.87 (2.27%), the average hospitalization cost per patient 50.02 (0.56%). The most common drugs prescribed in the study were Metformin, Glibenclamide, Gliclazide, Insulin, Ramipril, Amlodipine, Telmisartan, Metoprolol, Hydrochlorothiazide, Furosemide, Atorvastatin and Aspirin. The common laboratory test includes FBS/PPBS/ HbA1C, lipid profiles, urine analysis, HbA1c, Electrolytes and St. Creatinine. The average total health care cost for two months before and after counseling was found to be Rs. 211.5 and Rs. 1755 per patient. CONCLUSIONS: In summary this is the first Indian health care cost study conducted in the community setup. Our study result shows that there is decreased cost for the management of diabetes along with other co-morbidities condition after the counseling by 17% to 18% after the two months follow up. So more prevention efforts and resources are required to reduce this burden and to provide basic diabetes care in the low- and middle-income countries.

PD26

EFFECT OF DIABETES DISEASE MANAGEMENT PROGRAMS BASED ON BUNDLED PAYMENT ON CURATIVE HEALTH CARE COSTS IN THE NETHERLANDS

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OBJECTIVES: With the introduction of the bundled payment model in 2007, a large number of disease management programs (DMP) were initiated in the Netherlands. It is hypothesized that bundled payment will improve the quality of care and encourages tasks delegation and substitution. As result, health care costs may decrease resulting in efficiency improvement of diabetes care. METHODS: We analyzed the cost per patient in diabetes insurance agreements in the Netherlands using data of Vektis. Data from 52 care groups, covering about 50% of the diabetes type 2 population were used. Total, 61,497 diabetes type 2 patients, clustered in 3087 GBP, were analyzed in a longitudinal multi-level design. For two years 32% of the patients (or their GP) were enrolled in a DMP based on bundled payment and 21% in a DMP based on management fee whereas the patients of the control group (47%) stayed in ‘care-as-usual’ (CAU). RESULTS: Results show increasing curative health care costs of Euro 219 per patient from 2008 to 2009. While controlling for age, sex, comorbidity, and costs at baseline (average yearly costs in 2008 were Euro 4123), the average costs per patient enrolled in DMP based on bundled payment increased with Euro 288 more compared to CAU. The increase of costs of DMP based on management fee was not significant different from CAU. The increase in costs did not differ between health insurance agencies or GPs. Sensitivity analysis was performed with a much smaller and therefore less useful 3-year data set. Substantive conclusions remained the same. CONCLUSIONS: Results showed an increase in curative health care costs of diabetes patients caused by DMP based on bundled payment over a period of 2 years. Further research should investigate a longer time-span to study long-term effects of DMP on costs.

PD27

THE RELATIONSHIP BETWEEN THE PRESENCE OF METABOLIC COMPLICATIONS AND COST COMPONENTS OF TYPE 2 DIABETES MELLITUS PATIENTS IN TURKEY

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OBJECTIVES: An update of health economics analysis of type 2 diabetes mellitus (T2DM) in adult population in Turkey was performed. The relationship between metabolic complications and cost components is reported in this presentation. METHODS: Forty centres were selected from the list of centres in which adult T2DM patients were followed on routine basis. These centres were representative of the country, since they were selected by two-stage cluster sampling. Medical files were reviewed for two to five years prior to the study. Collected data included health care utilization items (medical and surgical treatments, laboratory tests, inpatient/outpatient visits, consultations and patient education). Item prices were obtained from the Ministry of Health and Social Security Organization of Turkey (1€ = 2.321 Turkish Liras; Feb 2012). RESULTS: A total of 942 patients’ data were included in the analysis. In 63.7% of the patients, no visits related to any diabetic complication had been recorded, thus these patients were regarded as patients without complication. The proportion of patients with more than two complications was 7.9% and 2.6%, respectively. Total annual cost, which was found to be 324.76 in patients with no systemic complication increased in 512.78, 641.94, 817.84 and 1835.06€ with increasing number of systems involved (from one system to four systems). CONCLUSIONS: The cost of T2DM related to various metabolic complications and cost components involved by diabetic complications. Since the prevalence of DM is quite high and is further increasing, prevention and/or delay of complications will be crucial to reduce the economic burden of diabetes on the general health care budget. [Integrating the costs from this analysis and the epidemiologic data from a recently updated local study (TURDEP-II), a burden of disease model will be developed and distributed soon].

PD29

GLYCEMIC CONTROL AND DIABETES-RELATED HEALTH CARE COSTS IN TYPE 2 DIABETES: A RETROSPECTIVE ANALYSIS BASED ON ADMINISTRATIVE AND CLINICAL DATA

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OBJECTIVES: Type 2 diabetes imposes a substantial economic burden on society. The objective of this study was to quantify the association between health care costs attributable to diabetes and level of glycemic control. METHODS: A retrospective analysis using a large administrative database and a clinical registry containing laboratory results was performed. Subjects, aged ≥45, were diagnosed for diabetes in 2008 and assigned to one of the 5 groups based upon the percentage of HbA1c levels; <6.5% (very good), 6.5%–7% (good), 7%–7.5% (fair), 7.5%–8% (poor), >8% (very-poor). Total annual cost, which was found to be 324.76 in patients with no systemic complication increased in 512.78, 641.94, 817.84 and 1835.06€ with increasing number of systems involved (from one system to four systems). CONCLUSIONS: Almost half (49.8%) of T2DM patients in this study showed a sub-optimal glycemic control. This analysis indicates that the diabetes-related costs are significantly higher for individuals who have a poor glycemic control compared with those patients who have an excellent glycemic control.