DETERMINANTS OF STOPPING TREATMENT WITH ORAL ANTIDIABETIC DRUGS IN DAILY CLINICAL PRACTICE
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OBJECTIVES: In daily practice many Type 2 Diabetes Mellitus (T2DM-)patients discontinue treatment. Therefore, the aim of this study was to investigate the determinants of (non-) persistence with oral antidiabetic drugs (OADs) in daily clinical practice. METHODS: From the PHARMO record linkage system, comprising among others linked drug-dispensing, and hospital data for >2.3 million subjects in The Netherlands, new users of OADs were identified in the period 1999–2005. Patients with ≥1 year of follow-up, were included in the study-cohort. Persistence with OAD-treatment in the first year of therapy was determined using the method of Catalan. Potential determinants of (non-)persistence included patient-characteristics, type of initial OAD-therapy, and cardiovascular co-morbidity.

RESULTS: The study included 33,299 new users of OADs. One year after start, 42% of new T2DM-patients had stopped using any OAD. The risk of non-persistence was decreased with male gender (HR: 0.97; 95% CI: 0.94–1.00), and cardiovascular drug use (HR: 0.91; 95% CI: 0.86–0.97). Regarding age, compared to patients ≥76 years, the age-group 55–75 years had a 16% lower risk, and the age-group 30–44 years had a 32% increased risk of non-persistence. Patients starting on combined metformin + SU had a lower risk of non-persistence with any OAD; compared to patients starting on metformin monotherapy, the risk was 23% lower (HR: 0.77; 95% CI: 0.70–0.85). The risk of non-persistence was increased with a specialist as first prescriber (HR: 1.20; 95% CI: 1.15–1.26), higher initial daily dose (HR: 1.09; 95% CI: 1.00–1.22), and higher initial daily dosing frequency (HR: 1.19; 95% CI: 1.02–1.20). CONCLUSION: In daily clinical practice about 40% of new T2DM-patients stop OAD-therapy within one year. Determinants of stopping OAD-medication were male gender, age-group, specialist as first prescriber, dosing, cardiovascular drug-use, and type of initial OAD-treatment.

EVALUATING CLINICAL AND PATIENT-REPORTED OUTCOMES (PROS) FOR PATIENTS WITH DIABETES PARTICIPATING IN A COMPREHENSIVE DISEASE MANAGEMENT PROGRAM
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OBJECTIVES: To identify differences in patients enrolled in a pharmacist-provided disease management program have improved clinical and PROs (humanistic and economic). METHODS: This program was developed and implemented at three independent community pharmacy sites. A prospective pre-post design was used. Adult patients with Type 2 DM and HbA1c levels >6% were included. Study measures: 1) Clinical: glycemic control, blood pressure, random blood glucose value, and body mass index (BMI); 2) Humanistic: Diabetes Knowledge Test (DKT), diabetes specific quality-of-life (D-39), and self-monitoring of blood glucose (SMBG); 3) Economic: diabetes-related sick days and ER visits; and 4) HEDIS process measures: incidence of annual eye and foot exams. Data were collected at baseline, 3 months, and between 6–9 months and analyzed using SPSS v14. Descriptive statistics and repeated measures ANOVA were used. Comparisons were made with 2005 NCQA national averages.

RESULTS: Sixty patients were enrolled. Most were women (63.3%) and the mean age was 62.43 years (±12.09). At study termination, 73% of patients achieved optimal glycemic control compared to 66% at baseline. Patients knowledge scores improved from 30.07 to 33.08 (p = 0.003). Patients experienced better control of their diabetes as was measure by D-39 (p = 0.02). The frequency of SMBG, increased from 1.83 to 2.17 tests per day (p = 0.045). The mean number of sick days and ER visits reported was 0.13 days (±0.46) and 0.03 visits (±0.16) at baseline, and 0.00 days (±0.00) and 0.05 visits (±0.32) at study termination. Percentage of patients receiving an eye exam and annual foot exam increased from 79.7% to 90.0%, and from 35.6% to 55.0%, respectively. CONCLUSION: Comparisons with NCQA data indicated that patients were relatively well controlled. Pharmacists’ interventions helped improve and maintain increased knowledge regarding diabetes. As a result of this heightened knowledge, patients were able to stave off disease progression during the study period.