OBJECTIVE: The aim of the study was to investigate gender differences in persistence with antihypertensive drugs (AHT).

METHODS: Data for this study were obtained from the PHARMO system including pharmacy records and hospitalisations in the Netherlands (n = 950,000). Patients between 1997–2001 who newly received monotherapy of AHTs were selected. One-year persistence was defined as the percentage of patients using AHTs at least 270 days and receiving AHT in 3 months after the 1-year follow-up period. Persistence was presented as 1-year persistence (95% CI). Odds ratios (OR) were calculated with logistic regression and adjusted for age, use of antidiabetics and lipid lowering drugs, and prior cardiovascular hospitalizations.

RESULTS: In the period 1997–2001, 17,113 patients newly received at least one AHT prescription with a follow-up >15 months. Of these patients, random samples of 500 patients per drug class were drawn. Persistence was highest in angiotensin II receptor blockers (ARBs) (62.1%), progressively lower in ACE-inhibitors (60.2%), beta blockers (35.5%), calcium channel blockers (34.7%), and diuretics (33.0%), resulting in the highest OR of 3.3 [95% CI: 2.5–4.4] for ARBs compared to diuretics. The persistence of AHT use in women is substantially lower than in men (40.4% versus 50.3%, OR 0.7 [95% CI: 0.6–0.8]).

CONCLUSIONS: These results demonstrate marked differences in persistence between AHT classes, with the highest persistence for ARBs and lowest for diuretics. Women were less persistent with their AHT compared to men. This low persistence leads to suboptimal treatment with substantial consequences. Especially in women, more improvement can be gained to improve their cardiovascular outcome.

DETERMINANTS OF NON ADHERENCE TO ANTIHYPERTENSIVE DRUG TREATMENT

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OBJECTIVES: In a previous study, we have identified side effects and lack of drug insurance coverage as the determinants of discontinuation in a group of patients newly prescribed antihypertensive medications. The current study aimed at identifying the determinants of non adherence to medication among those who had not discontinued.

METHODS: We conducted a prospective cohort study in which individuals prescribed a new antihypertensive monotherapy were identified through a network of 173 pharmacies. We interviewed participants by telephone three times over a 3-month period. At the end of this period, those individuals which reported still taking the medication initially prescribed, were included in the analysis. Self-reported non adherence was measured at three month using the Morisky’s 4-item questionnaire.

Those answering yes to any one of the 4 questions were deemed to be non adherent. We analyzed data using a multivariable logistic regression model.

RESULTS: Of 509 eligible participants, 118 (23.2%) reported non adherence to their drug treatment. Non adherence was significantly associated with the use of angiotensin converting enzyme inhibitors (Adjusted Odds Ratio (AOR) = 3.0; 95% CI 1.2–7.9) as compared to angiotensin II antagonist losartan, and the belief that hypertension is not a risk factor for cardiovascular diseases (AOR = 2.0; 95% CI 1.2–3.3). On the other hand, non adherence was inversely associated with the use of more than 4 pills of medication a day (AOR = 0.3; 95% CI 0.2–0.6).

CONCLUSIONS: Our findings suggest that determinants of non adherence are not the same as those for discontinuation. They also suggest that adherence to drug treatment could be improved by a proper selection of medication, and by attempts to correct wrong perceptions patients may have about hypertension. Our finding that taking more than four pills was associated with better adherence is concordant with data recently published by others.

DISCONTINUATION RATES OF PHARMACOLOGICAL TREATMENTS FOR OVERACTIVE BLADDER: COMPARISON OF OXYBUTYNIN IMMEDIATE AND EXTENDED RELEASE IN THE UNITED KINGDOM

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OBJECTIVES: To compare the discontinuation rates due to poor tolerability in patients with overactive bladder treated with either once daily dosed extended release (XL), or twice or greater daily dosed, immediate release (IR) oxybutynin.

METHODS: We used the real-world longitudinal data (1995–2002) from IMS Mediplus UK to identify all patients new to therapy initiated on either oxybutynin IR or XL. The first script defined the patients study cohort and the date of that script was the study index date from which monitoring outcomes followed. These scripts were linked to reason to stop therapy, including poor tolerability. The start-date-match approach was used to adjust for the later market entrance of oxybutynin XL. We used c2 test to evaluate the statistical significance in the difference of discontinuation rates between both groups.

RESULTS: We identified 147 patients initiated on oxybutynin XL and 216 patients on oxybutynin IR, with an average daily dose of 10.0 mg and 8.9 mg respectively. Patient demographics were comparable. In the oxybutynin XL group, 29 patients (19.7%) had a record for stopping therapy compared to 129