OBJECTIVES: To investigate the impact of comorbid cardiovascular disease (CVD) on antithyroid medication adherence. METHODS: Eligibility and claims data (2002–2004) were used to identify patients 240 years of age with a diagnosis of type 2 diabetes concurrent with hypertension (HYPT), coronary artery disease (CAD), and/or heart failure (HF), and at least two prescription fills for an antithyroid medication. Medically necessary fills were assessed using propensity score matching and Multivariate logistic regressions were used to assess CVD and other risk factors associated with nonadherence with antithyroidic medication using 2004 data. RESULTS: A total of 16,922 patients were identified. Patients with two comorbid CVD were more likely to use or be adherent with combination cardiovascular and antithyroidic medications (HYPT + CAD (79.2%), represented as proportion of use/adherence rate), HF + CAD (88%/31%)] than those with a single comorbid CVD (HYPT (68%/21%), CAD (65%/21%), and HF (72%/21%), respectively, p < 0.0001). The adherence rate for use of both antithyroidic and cardiovascular medications was only 24%. The major significant predictors of diabetic medication nonadherence included no fill of (OR:2.6, 95% CI:2.28–3.01) or nonadherent with (OR:3.43, 95% CI:3.13–3.75) cardiovascular medication; MedCal-only eligibility (OR:1.76, 95% CI:1.62–1.91 vs. MedCal-Medicare eligible); noncompliance with diabetes care guidelines (no eye examination, no mammography, and/or mammographic test within a 2-year period); presence of hypertension (OR:1.34, 95% CI:1.17–1.59), a greater number of inpatient visits (OR:1.17, CI:1.10–1.24) or diabetes-related inpatient visits (OR:1.41, 95% CI:1.06–1.87); Black race (OR:1.47, 95% CI:1.29–1.66 vs. White); type of comorbid CVD vs. HF + CAD (HYPT OR:0.73, CI:0.63–0.81), CAD (OR:0.73, CI:0.63–0.81), and HF + CAD (OR:0.76, CI:0.69–0.84) or more cardiovascular medication fills (OR:3.15, CI:1.18–1.55). CONCLUSIONS: CVD comorbidity and nonadherence with cardiovascular medications and diabetes care guidelines were major significant factors associated with nonadherence to antithyroidic medications in a California Medicaid sample. Patient nonadherence behaviors should be considered when providing care for diabetes patients with comorbid CVD.

HEALTH BELIEFS AND THEIR IMPACT ON MEDICATION ADHERENCE IN PATIENTS WITH COEXISTING DIABETES, DYSLIPIDEMIA AND HYPERTENSION


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OBJECTIVES: As individual treatment guidelines for diabetes, dyslipidemia and hypertension have evolved with more aggressive treatment targets, there may be an unintended consequence of poor medication adherence in patients having all three conditions. The study objective was to investigate how patient health beliefs affect medication adherence in patients coexisting diabetes, dyslipidemia and hypertension.

METHODS: An online survey was administered in December 2010 to iGuard, org. Patients taking at least 1 medication for diabetes, dyslipidemia and hypertension were invited to participate in the nationwide survey (n = 2150). Survey items included demographics, the Medication Adherence Report Scale (MARS)—score range = 3–25), potential adherence barriers and adherence trade-off scenarios. Patients were assigned a resultant health belief score based on responses to the trade-off scenarios. Medication adherence rates between diabetes and hypertension health belief groups (dyslipidemia group excluded due small sample size) and trade-off scenario selections were compared using t-tests. RESULTS: A total of 325 patients completed the survey, 218 patients demonstrated a dominate health belief for diabetes, 81 for hypertension, 13 for dyslipidemia and 19 with no dominate health belief. In trade-off scenarios, patients consistently stated they would choose taking diabetes medications over hypertension and dyslipidemia medications. (p < 0.01) Complete adherence (MARS score = 25) with diabetes medications was higher in the diabetes health belief group (39.4%) compared to hypertension health belief group (22.2%) (p = 0.008); however there was no difference between the groups with complete adherence to hypertension (p = 0.811) or dyslipidemia (p = 0.278) medica-

CONCLUSIONS: Diabetes therapy was considered the most important treatment by the majority of patients with coexisting diabetes, dyslipidemia and hypertension. However, in patients who considered hypertension therapy most important, there was significantly less adherence to diabetes medications while exhibiting similar adherence to hypertension and dyslipidemia medications. These insights could be considered by clinicians when assessing adherence in these complex patients.