such as improved medication adherence. The objective of this study was to estimate the impact of type of pharmacy (chain/independent) on adherence to Oral Hypoglycemic Agents (OHAs) in patients newly diagnosed with type 2 diabetes.

METHODS: Newly diagnosed type 2 diabetes patients during a four-year period were identified from a Medicaid claims database. The provider of the index prescription was classified as a chain or independent pharmacy. Utilization patterns (switching, augmentation, discontinuation, non-modification) and adherence to OHAs (Medication Possession Ratios) were computed for a 12-month follow-up period from the date of the index OHA prescription. A multivariate framework was used to estimate the impact of type of pharmacy on utilization patterns and adherence, controlling for demographics, co-morbidity, diabetes severity, and regimen complexity. RESULTS: A total of 1214 newly diagnosed type-2 diabetes patients were identified (independent pharmacy = 430; chain pharmacy = 784). Utilization patterns were not significantly different between patients filling their prescriptions at an independent pharmacy versus those filling prescriptions at a chain pharmacy. Independent-sample t-tests indicated that adherence to OHAs (Mean ± S.D.) was significantly higher for patients filling their prescriptions at an independent pharmacy (0.90 ± 0.11) as compared to those filling prescriptions at a chain pharmacy (0.87 ± 0.13) (p = 0.02). Results of a semi-log OLS model indicated that controlling for covariates, patients filling prescriptions at an independent pharmacy had 2.30% higher adherence to OHAs as compared to those filling prescriptions at a chain pharmacy (p = 0.04). CONCLUSION: Patients filling prescriptions at independent pharmacies have significantly higher adherence to OHAs as compared to those filling prescriptions at chain pharmacies. This improved adherence may affect glycemic control and consequently incidence of diabetes related complications.

COSTS AND ADHERENCE ASSOCIATED WITH LONG TERM USE OF THIAZOLIDINEDIONE THERAPY IN MEDICAID ENROLLED TYPE 2 DIABETES PATIENTS

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OBJECTIVES: Long-term adherence to medications among type 2 diabetes patients may have an impact on health care costs and hospitalizations. This study examined differences in medication adherence, and persistence, hospitalization and health care costs between patients with type 2 diabetes enrolled in the North Carolina Medicaid newly starting thiazolidinedione (TZD) therapy and those starting other oral antidiabetic agents. METHODS: A total of 1774 patients newly starting TZD therapy between July 2001 and June 2002 were compared to 216 patients starting metformin and 1179 patients starting Sulfonylureas. Medication adherence was measured as Medication Possession Ratio using prescription refill patterns. Multivariate regression analyses were used to determine the difference in adherence rates adjusting for other covariates. RESULTS: Whites had highest mean medication adherence rate of 59% which was significantly different from Blacks (54%) (p < 0.05). Thiazolidinediones’ adherence rate of 60% was significantly higher than metformin (22%) and sulfonylurea group (57%) (both p < 0.05). Whites had higher adherence to all the therapies as compared to other two races. In multivariate analyses, the adherence rate of black patients was found to be significantly lower by 12% as compared to whites after adjusting for other variables (p < 0.05). Metformin users were associated with 62% decrease in adherence rate as compared with the sulfonylurea group and 63% decrease in adherence rate as compared with thiazolidinediones (both p < 0.05). CONCLUSION: Antidiabetic medication adherence was associated with race as well as type of therapy. Future research should focus on investigating patient-related and therapy-related factors affecting medication adherence in type 2 diabetes patients.

ASSOCIATION BETWEEN RACE AND MEDICATION ADHERENCE IN TYPE 2 DIABETES MEDICAID ENROLLEES

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OBJECTIVE: Medication adherence is an important factor in improving outcomes among type 2 diabetes patients. The primary objective of this study was to determine the association between race and medication adherence among type 2 diabetes patients. The secondary objectives were to determine the association between type of therapy and medication adherence and to determine if race has an influence in determining the medication adherence to specific antidiabetic therapy. METHODS: This retrospective cohort study was conducted using North Carolina Medicaid prescription claims. A total of 1774 patients newly starting Thiazolidinediones were compared to 216 patients starting metformin and 1179 patients starting Sulfonylureas. Medication adherence was measured as Medication Possession Ratio using prescription refill patterns. Multivariate regression analyses were used to determine the difference in adherence rates adjusting for other covariates. RESULTS: Whites had highest mean medication adherence rate of 59% which was significantly different from Blacks (54%) (p < 0.05). Thiazolidinediones’ adherence rate of 60% was significantly higher than metformin (22%) and sulfonylurea group (57%) (both p < 0.05). Whites had higher adherence to all the therapies as compared to other two races. In multivariate analyses, the adherence rate of black patients was found to be significantly lower by 12% as compared to whites after adjusting for other variables (p < 0.05). Metformin users were associated with 62% decrease in adherence rate as compared with the sulfonylurea group and 63% decrease in adherence rate as compared with thiazolidinediones (both p < 0.05). CONCLUSION: Antidiabetic medication adherence was associated with race as well as type of therapy. Future research should focus on investigating patient-related and therapy-related factors affecting medication adherence in type 2 diabetes patients.