ABSTRACT

Objectives: We sought to examine whether there are patterns of oral hypoglycemic agent adherence among primary care patients with type 2 diabetes mellitus (DM) that are related to baseline patient characteristics, intervention condition, and clinical outcomes.

Method: In all, 180 patients prescribed pharmacotherapy for type 2 DM and depression in primary care were randomly assigned to an integrated care intervention or usual care. Integrated care managers collaborated with physicians to offer education, guideline-based treatment recommendations, and monitor adherence and clinical status. Adherence was assessed using the Medication Event Monitoring System (MEMS). Longitudinal analysis via growth curve mixture modeling was carried out to classify patients according to the patterns of adherence to oral hypoglycemic agents across 12 weeks. Hemoglobin A1c (HbA1c) assays were used to measure glycemic control as the clinical outcome.

Results: Three patterns of change in depression symptoms over 12 weeks were identified: adherent (37.0% of the sample), increasing adherence (29.2% of the sample), nonadherent (33.8% of the sample). Global cognition and intervention condition were associated with the adherence pattern (p<0.05). Patients with an increasing adherence pattern were more likely to have achieved an HbA1c < 7% (unadjusted OR = 4.39, 95% CI [1.19, 10.12]); adjusted OR = 17.34, 95% CI [3.23, 93.17]) at 12 weeks in comparison with patients with the nonadherent pattern.

Conclusion: Identification of type 2 DM patients at particularly high risk of nonadherence and poor clinical outcomes is important for the development and delivery of interventions.