Patient and Provider Factors Affecting Clinical Inertia in Patients With Type 2 Diabetes on Metformin Monotherapy

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Purpose: Our aim was to determine the extent of clinical inertia and the associated patient and provider factors in patients with type 2 diabetes on metformin monotherapy (MM) at a large integrated health care system in the United States.

Methods: The study cohort included patients with type 2 diabetes aged 18 to 85 years, on MM between January 2009 and September 2013, who experienced MM failure (had an uncontrolled glycosylated hemoglobin [HbA1c] reading (≥8.0% [64 mmol/mol]) after at least 90 days of MM). Clinical inertia was defined as absence of treatment intensification with an add-on therapy within 180 days after the MM failure (index date). The impact of patient and provider factors on clinical inertia was determined using generalized estimating equations.

Findings: The study cohort consisted of 996 patients; 58% were men and 59% were white, with a mean age of 53 (11.8) years. Of these, 49.8% experienced clinical inertia. Lower HbA1c at index date, absence of liver diseases, absence of renal diseases, and greater provider age were associated with clinical inertia. The clinical inertia rate in a secondary analysis considering HbA1c <7.0% (53 mmol/mol) as glycemic control was 67.9%. Greater patient age, lower HbA1c at index date, greater provider age, and being a primary care physician were associated with clinical inertia.

Implications: Considerable clinical inertia rates were observed in our real-world patient population, suggesting the need of interventions to reduce clinical inertia in clinical practice. Information about patient and provider factors affecting clinical inertia provided by this study could help healthcare policymakers plan and implement such interventions.