Improving Outcomes of People With Diabetes Through Overcoming Therapeutic Inertia

Preface

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Clinical and therapeutic inertia continue to be major issues in the management of chronic diseases such as diabetes. Only about 50% of patients with diabetes are reaching evidence-based glycemic goals (1), and fewer than 20% of patients have A1C, blood pressure, and LDL cholesterol levels all at goal (2). In addition, the rates of preventive practices such as checks for retinopathy, neuropathy, and nephropathy have not improved in the past decade (3).

The *Oxford English Dictionary* defines inertia as “a tendency to do nothing or to remain unchanged” (4). The term “clinical inertia” has been used to refer to the underuse of effective therapies and interventions despite a wealth of evidence regarding their benefits in preventing serious negative outcomes (5,6). However, the term “therapeutic inertia” may be more appropriate specifically to describe a lack of timely adjustment to the treatment regimen when a patient’s treatment goals are not met, whereas the wider concept of “clinical inertia” also encompasses other deficits in care provision, such as lack of appropriate screening or referrals (7). Because this *Diabetes Spectrum* From Research to Practice section focuses on the prescribing decisions of health care providers (and related patient education interventions), we will use the more specific term “therapeutic inertia” throughout.

Therapeutic inertia has been identified in many different aspects of diabetes care, including not only glycemic management, but also therapy for blood pressure, lipid control, and other related conditions. Importantly, therapeutic inertia should be understood to encompass not only *advancement* of therapy, but also *deintensification* of the therapeutic regimen when appropriate. For example, many elderly patients with comorbidities may not need an A1C goal of 7% and thus could benefit from a relaxing of their therapeutic regimen. Detrimental patient outcomes such

as hypoglycemia and falls can result from either therapeutic inertia scenario (7).

In this research section, we explore multiple facets of therapeutic inertia through a series of seven articles by experts on the topic. First, Susan L. Karam and her colleagues provide the latest information on the prevalence, causes, and consequences of therapeutic inertia (p. 8). They make a succinct but convincing case that multiple stakeholders, including clinicians, patients, health systems, payers, and companies that produce medications, devices, and other products for people with diabetes all must play a role in addressing and reducing therapeutic inertia.

Next, Carla Cox and Diana Isaacs detail six factors that can lead to or exacerbate therapeutic inertia in the provision of appropriate diabetes patient education and offer strategies to address each one in turn (p. 16).

In our third article (p. 22), Sarah D. Corathers and Daniel J. DeSalvo outline some common challenges in the care of pediatric type 1 diabetes patients, for whom inadequate glycemic control and burdensome self-care regimens remain major issues despite advances in therapies and technologies. These authors address patient-provider issues such as too much or too little data, fear of hypoglycemia, and inadequate attention to psychosocial needs and social determinants of health, as well as systems-level issues such as a narrow focus on glycemic goals, ineffective medical nutrition therapy, a limited pharmacotherapeutic armamentarium, and antiquated clinical care models. These are also major challenges for people with type 2 diabetes.

We next turn attention to factors contributing to therapeutic inertia that are specifically related to patients’ medication experiences, in an article by Andrew S. Bzowickyj

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and John E. Begert (p. 31) that highlights issues including drug costs, adverse effects, and ever-changing clinical practice guidelines. Low health literacy with regard to medications is also a significant problem, as is many patients' tenuous grasp of the medical jargon and insurance nuances that often arise in diabetes care encounters. As pharmacists, these authors speak to the advantages that may accrue to providers, patients, and health care systems when pharmacists take an active role on the diabetes care team.

One especially difficult medication issue for patients with type 2 diabetes is the need to transition to insulin therapy, particularly with regard to concerns about injections, hypoglycemia, and weight gain. Acceptance of insulin therapy has been a significant issue for decades despite the advent of better options in terms of delivery and monitoring devices and newer insulins with lower risks of hypoglycemia. Susan J. Guzman addresses this issue from a behavioral perspective (p. 38). Her article explores how therapeutic inertia can result when obstacles to starting insulin therapy seem to outweigh its perceived benefits and offers strategies to help tip the scales toward action.

In most developing countries, the majority of people with diabetes are now being managed in the primary care setting. In our sixth article, Nemin Adam Zhu and Stewart B. Harris take on the "challenge that just won't go away"—namely, that of therapeutic inertia among patients with type 2 diabetes in primary care (p. 44). They remind us that target attainment has not improved despite the proliferation of detailed clinical practice guidelines and better therapeutic options and promote a proactive approach involving early combination therapy for glycemic control that has the potential to move the needle on therapeutic inertia and significantly improve therapeutic goal attainment and clinical outcomes.

We conclude with an article by Manel Mata-Cases and his colleagues (p. 50), who eloquently remind us that single

interventions rarely solve problems as consequential as therapeutic inertia. They draw distinctions between appropriate inaction and inappropriate inertia and explain why the concept of therapeutic inertia must be understood to encompass both advancement and deintensification of therapies to best meet the clinical needs of individual patients. They then systematically review the benefits of targeting therapeutic inertia through an ambitious, comprehensive, multifactorial plan that requires action on the part of all stakeholders and targets multiple therapeutic goals beyond glycemic control alone.

We wish to sincerely thank our faculty of health care experts who have contributed their time and effort to making this From Research to Practice section a valuable resource for professionals on the front lines of diabetes care and education. We also thank the *Diabetes Spectrum* readership and our collective patients with diabetes, who continue to inspire our efforts on a daily basis.

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