

Introduction

Despite a greater understanding of the complex nature of diabetes, the widespread dissemination of evidence-based guidelines for diabetes management, and the availability of many new therapies, control of type 2 diabetes mellitus (DM) in the United States continues to be a challenge.¹ According to the 1999–2000 National Health and Nutrition Examination Survey (NHANES), only 37% of patients with type 2 DM achieved glycosylated hemoglobin (A1C) levels <7.0%, while another 37% had A1C levels >8.0%.² Furthermore, glycemic control rates actually declined by 20% between NHANES III (1988–1994) and NHANES (1999–2000).¹

Moreover, there is increasing evidence for an evolving epidemic of type 2 DM. Recent data from the Centers for Disease Control and Prevention indicate that 20.8 million people in the United States now have type 2 DM.³ In addition, an estimated 41 million people have prediabetes (defined as impaired fasting glucose or impaired glucose tolerance) and are likely to progress to type 2 DM within 10 years without adequate intervention.³ The economic burden of DM is staggering—the annual cost (estimated in 2002 dollars) of DM in the United States alone could rise from \$132 billion to \$156 billion by 2010 and \$192 billion by 2020.⁴

This publication identifies some of the current challenges in diabetes management and presents information that should be useful to health care professionals who care for people with type 2 DM. In the first paper, I discuss the need to use the currently available therapies for diabetes management to: (1) achieve glycemic control and reduce diabetes complications; (2) improve patient adherence to lifestyle and pharmacologic interventions; (3) reduce barriers to early use of insulin therapy; (4) educate people with type 2 DM about effective diabetes self-management; and (5) improve the delivery of health care services for people with such chronic health conditions as diabetes.

In the second paper, Jaime A. Davidson, MD, FACP, FACE, presents a case study that offers important lessons

in diabetes management. Greater awareness among clinicians and patients with type 2 DM of the consequences of poor glycemic control can result in decisions that aggressively target more optimal control. Effective communication between health care professionals and patients, intensified patient self-monitoring of blood glucose, and new diabetes treatment options allow for achievement of glycemic control without unacceptable side effects.

The third paper by William V. Tamborlane, MD, focuses on the growing problem of type 2 DM among children and adolescents. Diabetes treatment options have been significantly enhanced in recent decades. With these improvements and the efforts of multidisciplinary teams, the complications of type 2 DM can be prevented or mitigated in young people with DM.

Of special note, the use of insulin analogues may enhance convenience and improve glycemic control for patients with DM.

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