

EDITOR'S PAGE

Global Dimensions of Diabetes: Information and Synthesis



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Currently in the United States, the raw prevalence rate for diabetes is 10.7%, with more than 24 million with diabetes and another 6.7 million with undiagnosed diabetes, generating an annual expenditure of \$9,800.00 per patient.¹ Unfortunately, diabetes is not a unique American problem. In the 2014 Global Diabetes Scorecard by the International Diabetes Federation,¹ Sir Michael Hirst emphasized the importance of health systems, governments, and diabetes organizations to work together advancing preventive policies, financing, and rights to optimize diabetes care on a global scale. This call-to-action in the context of 382 million people with diabetes worldwide and the United Nations resolution A/RES/66/2² to reduce non-communicable diseases resonates with the missions of US clinical endocrinology and diabetes professional medical organizations to figure out ways to improve diabetes care and reduce the human suffering associated with this ravaging disease.

This special issue of *Annals of Global Health* is dedicated to diabetes care and represents a focused response to the query, "Can we derive important information from diabetes care in various countries from around the world that can help us understand and successfully manage the complexity of the diabetes epidemic?" Several key components are implicit to the query. First, that diabetes is a significant health care problem with pervasive adverse effects on society. Second, that the scale of the problem is truly global. Third, that the problem is *complex*—a descriptor that itself is often relegated to triviality or pure academics. And fourth, that the problem can potentially be solved. This multifaceted nature of diabetes requires an assessment of lifestyle, behavior, genetics and epigenetics, and the intrauterine environment, all to create an integrated effort.³ Moreover, it is not that the problems of one country should be addressed for just that one country, but rather that in aggregate, information gleaned from a portfolio of countries

can generate emergent ideas to solve the complex diabetes problem globally. One can envision enrichment of current diabetes care models, guidelines, and algorithms with conclusions based on patients from different cultures and regions in the world. Admittedly, this is a bold and aspirational approach, but it is in this type of vehicle—a special issue—that the adventure can begin.

There are still a few premises that need to be explained. Of all the variables that interact with and give rise to diabetes, why would individual countries with arbitrary geographic boundaries be germane? The answer is quite simple: it is governments and their respective health care policies and socioeconomic statuses that drive local resource availability and subsequent interventions. Not surprisingly, diabetes prevalence rates are increasing the most in rural and low-middle income areas, underscoring economics.⁴ Cultural differences also have an influence on diabetes phenotypes and implementation parameters. This issue extends to eating patterns, attitudes toward doctors and medicines, beliefs, religion, linguistics and communication preferences, and other lifestyle variables,⁵ as well as the lack of effective guideline adaptations to different target populations ("transculturalization")⁶ and also the interaction of acculturation to Westernized lifestyle with a genetic susceptibility, especially in aboriginal populations.⁷ Clearly, understanding the effects of one culture in one country can assist diabetes care for patients of the same culture but in another country. Lastly, the source of information and weight of evidence varies from one locale to another. For instance, besides peer-reviewed publications identified by searching PubMed, there are important non-English, gray literature sources that are typically undiscovered and may harbor critical information, particularly regarding indigenous populations.⁸

In this special issue, authors were asked to specifically address the context of diabetes care in their

country (eg, infrastructure and socioeconomic), relevant cultural factors, and information/reference sources from both the white and gray literatures. Authors were also asked to focus on epidemiology, key drivers for epidemiological transitions (eg, nutritional, demographic, and economic), specific management strategies and resources (eg, glucose testing and devices, medications, and other technologies), and unique challenges and solutions. In addition, people-first language was encouraged

(“person with diabetes”) instead of disease-first language (“diabetic person”).

This issue is organized by world region (Latin America, Europe, Africa, and Asia) with representative countries presenting their data, diabetes management profiles, and opinions regarding challenges and potential solutions. This information is then compiled, analyzed, and then major findings are synthesized into a core set of relevant conclusions that can be (potentially) leveraged into action.

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