**Objective:** Prompted by anecdotal evidence of a higher rate of type 2 diabetes, we set out to investigate the prevalence of diabetes, its risk factors, and co-morbidities among immigrant Guyanese patients being treated in a family medicine health center in Schenectady, New York.

**Methods:** Patients were ascertained from a registration database of all patients aged ≥ 30 years who were treated from 2004 to 2006. We then conducted a detailed retrospective chart review of all Guyanese, Caucasian, African American, and Hispanic patients with diabetes and randomly selected non-diabetic controls.

**Results:** Of 222 Guyanese patients, 67 (30.2%) had a diagnosis of diabetes, compared with 47/219 (21.5%) of Hispanics, 132/777 (17.0%) of African Americans, and 442/2834 (15.6%) of Caucasians (P<.0001). Compared with the other racial and ethnic groups, the Guyanese diabetic patients were significantly leaner and more likely to be male.

**Conclusion:** We found a very high prevalence of type 2 diabetes among the Guyanese patient population studied and found unique characteristics when compared with other ethnic and racial groups. These findings have alerted local clinicians to intensify diabetes screening among Guyanese patients. Further research is needed to confirm these observations and to develop strategies to prevent and control diabetes among Guyanese residents.

**Key Words:** Guyanese, Guyana, Type 2 diabetes,Minorities

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**INTRODUCTION**

Guyana, the third smallest country in South America, is nestled in the north of the continent between Suriname and Venezuela and borders the Atlantic Ocean. Originally a Dutch colony in the 17th century, Guyana came under British rule in 1815. The abolition of slavery led to Black settlement of urban areas and importation of indentured servants from India to work on the sugar plantations. According to the 2002 census, the ancestry of the population is 44% East-Indian, 30% African, 17% mixed, and 9% Amerindian. The population is predominantly young, with a median age of 23.9 years. Only 4.8% of Guyanese are older than 65 years. Life expectancy is 71.4 years for females and 63.6 years for males. As of July 2011, the population of Guyana was estimated to be 741,908 people. According to the Guyanese Ministry of Health, diabetes is ranked as the fourth leading cause of death in the country and the second most prevalent cause of chronic non-communicable disease among individuals older than 45 years.

Over the past four decades, it is estimated that more than 500,000 people have emigrated from Guyana to North America, with approximately 50,000 people immigrating annually. Most of the Guyanese immigrants reside in the northeastern United States and Canada. In 2006, the Guyanese community was ranked the 5th most populous recent immigrant group in New York City, amounting to a population of 142,946.

It is estimated that approximately 6,000–10,000 Guyanese have immigrated to Schenectady, N.Y. since 2000, but absolute statistics are lacking, as they are not captured in official census data. Spurred by a continuing decline in population (according to census figures, the population of Schenectady dropped 33% from 92,000 in 1950 to 62,000 in 2000), with associated abandoned housing, shuttered storefronts, rising crime rate and a shrinking tax base, the incumbent mayor set out to recruit a new population for the city. Initially, he recruited Guyanese living in the Richmond Hills area in Queens, N.Y. and later directly from Guyana. These industrious, English-speaking South Americans, largely of Indian heritage (Indo-Guyanese), were offered low-cost housing and improved job prospects. The recruitment effort was successful and, according to the 2010 census, Schenectady experienced a 7% population increase from 2000 to 2010, thought to be primarily affected by the influx of Guyanese into the city.

As Guyanese immigrants began to seek medical care in Schenectady, community physicians noted that many had type 2 diabetes mellitus. Furthermore, diabetes appeared to be more common in younger and leaner men and women than was normally seen among other non-Guyanese patients. These observations led us to conduct an initial retrospective chart review of 140 Guyanese adults seen in our family health center. This initial study revealed an unusually high prevalence of type 2 diabetes (32.6%), afflicting relatively young (mean age 40.2 years) and lean (66% with BMI <30) Guyanese patients. Medline literature and Google internet searches performed prior to initiating this study yielded no reports about diabetes among Guyanese, either in Guyana or in expatriate communities. The absence of information in the medical literature and the results of our initial study prompted us to undertake extensive research to understand the epidemiology and implications of diabetes among Guyanese in Schenectady.