

Estimated healthcare expenditures due to diabetes in the North America and Caribbean Region



Joao Diogo da Rocha Fernandes¹, Katherine Ogurtsova¹, Leonor Guariguata¹, Ute Linnenkamp¹, Till Seuring¹, Ping Zhang², Lydia Makaroff¹

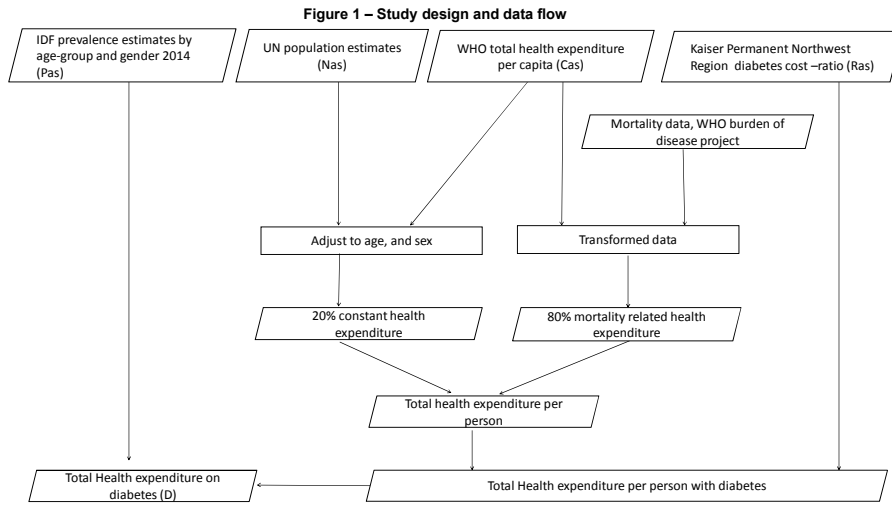
¹ International Diabetes Federation, Brussels, Belgium
² Division of Diabetes Translation, Centers for Disease Control and Prevention, Atlanta, GA, USA

Aims and objectives:

Diabetes imposes a large economic burden on healthcare systems. The International Diabetes Federation (IDF) Diabetes Atlas tracks healthcare expenditures related to diabetes globally and regionally¹⁻⁴. Here, the 2014 estimates for the IDF North American and Caribbean region are presented (NAC).

Methods:

Health care expenditures due to diabetes for the region were calculated as a sum of the expenditures from 17 countries and territories, which was estimated using an attributional fraction model, taking in consideration the differences between gender and age groups⁵⁻⁷. Data needed for the model were obtained from: 2014 estimates of population by age and sex from the United Nations World Population Prospects (2012), 2014 diabetes prevalence estimates from the IDF Diabetes Atlas Update (2014), 2012 health expenditure estimates (2012) from the World Health Organization, and expenditure ratios between people with and without diabetes from US Kaiser health insurance claims data (2002). Expenditures were expressed in 2012 US dollars (USD) (Figure 1).



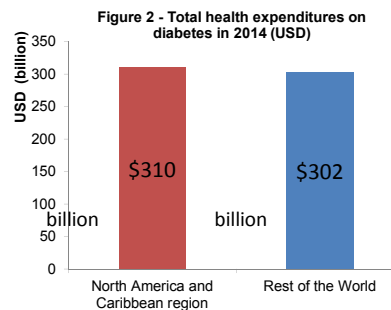
Results :

The estimated total healthcare expenditure on diabetes in the region was \$310 billion (2012 USD), representing more than 50% of the World's health expenditure on diabetes (Figure 2).

This fact is in large part explained due to the US's health expenditure on diabetes, which was \$281 billion USD (Table 1).

Within the North American and Caribbean region, diabetes was responsible for 1 dollar in 8 of the regional total health spending in 2014.

Regarding the health expenditure per capita, the North American and Caribbean region spent on average \$8,011 USD per person with diabetes, against a world average of \$1,583 USD. There were great disparities in health spending between countries within the region. Haiti had the lowest per capita spending of \$145 USD, compared to the US with the highest per capita spending at \$10,902 USD (Figure 3).



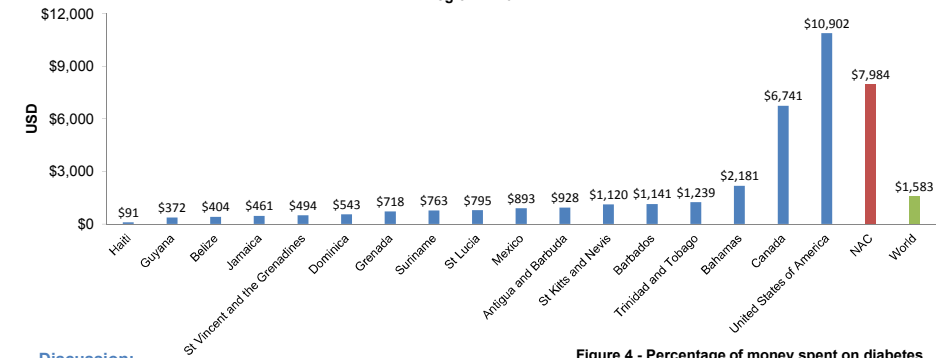
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Table 1 – Total health expenditure on diabetes per country in the IDF North America and Caribbean region in 2014

Country	Total health expenditure on diabetes (2012 USD)	Country	Total health expenditure on diabetes (2012 USD)
United States of America	\$281 billion	Guyana	\$23 million
Canada	\$20 billion	Belize	\$10million
Mexico	\$8 billion	St Lucia	\$8 million
Trinidad and Tobago	\$168 million	Antigua and Barbuda	\$7 million
Jamaica	\$85 million	St Kitts and Nevis	\$5 million
Bahamas	\$76 million	Grenada	\$4 million
Barbados	\$35 million	St Vincent and the Grenadines	\$3 million
Haiti	\$29 million	Dominica	\$3 million
Suriname	\$28 million		

Figure 3 - Mean health expenditure per person with diabetes in the IDF North America and Caribbean region in 2014



Discussion:

The 2014 estimates on the total health expenditures on diabetes confirm the large economic impact caused by diabetes on health systems. This is observed across low-, middle- and high-income countries of the North America and Caribbean region (Figure 4). In upper middle-income countries, a larger share of resources (15.7%) was allocated to diabetes, over 3% more than the regional average (12.9%).

When analyzed the distribution of the health expenditure on diabetes across sex and age groups a large diversity was observed (Figure 5). The age-group with the highest spending was the 5.2 million females aged 60-69 (\$47 billion USD). The age-group with the lowest level of spending was the 0.7 million males aged 20-29 (\$5.7 billion USD).

Figure 4 - Percentage of money spent on diabetes from total expenditure on health in NAC in 2014

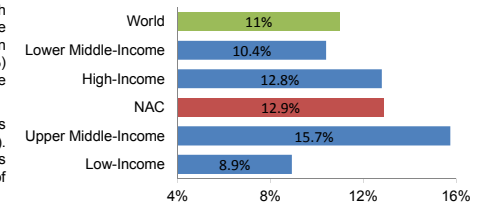


Figure 5 - Health expenditure on diabetes by sex and age group in the IDF North America and Caribbean region in 2014



Conclusion:

The prevalence of diabetes and the overall expenditure associated with it have been on the rise for the past decade¹⁻⁴.

In 2014, the estimated total healthcare expenditure on diabetes in the IDF North America and Caribbean region was USD \$310 billion, representing more than 50% of the global health expenditure on diabetes of \$612 billion USD. The North American and Caribbean region spent on average \$8,011 USD per person with diabetes, substantially higher than the world average of \$1,583 USD.