Diabetes is a common cause of death and disability worldwide. The early detection is crucial in the treatment of the disease. People in Latin America are often unaware of their sickness. We have consolidated the data US volunteers collected over a period of five years of testing populations in the Yucatan Peninsula to estimate the disease prevalence. Diabetes diagnosis was based on glucose above the norm (≥126mg/dl fasting, ≥201mg/dl postprandial). We classified the patients groups based on age and sex. First we assessed the total prevalence of type II diabetes and then we compared female versus male in groups aged more than twenty versus less than twenty. We computed descriptive statistics and compared men and woman and young and old as well as the relation of prevalence in this region to the prevalence in the United States. 95% confidence intervals (CIs) were computed to determine the accuracy of the prevalence estimates. We found that those <20 years old were significantly less likely to have diabetes than those >20 years old (3.4% versus 27.2%, p<0.001). Males were more likely to have diabetes than females <20 years old (4.4% versus 2.3%, p=0.04) while males >20 years old were nonsignificantly less likely to have diabetes than females (24.0% versus 29.9%, p=0.08). The prevalence rate of 3.4% (95% CI 2.5-4.5%) in those <20 years old is significantly higher than the US rate of 0.26% for this age group (p<0.001). Similarly, the prevalence rate of 27.2% (95% CI 24.0-30.6%) in those >20 years old are significantly higher than the US rate of 11.3% (p<0.001). Our data shows a prevalence that is higher than that published by the International Diabetes Federation (10.6%) in the year 2007. This mission helps the affected individuals and contributes data to provide more accurate prevalence statistics.

pcallas 10/29/22 9:08 AM

Comment: "Random" implies a truly random sampling method was used, which I don't think was the case.