



Preliminary Results:

Prevalence of Diabetes, Hypertension and Their Risk Factors in the Municipality of Villa Nueva, Guatemala

Background

Diabetes mellitus, hypertension and other noncommunicable diseases are increasing rapidly in the developing world, particularly in urban areas. This study is part of the Central American Initiative in Diabetes (CAMDI), sponsored by the Pan American Health Organization (PAHO), which also includes Costa Rica, El Salvador, Honduras, and Nicaragua.

Population Studied

The survey was conducted in the municipality of Villa Nueva, department of Guatemala. This municipality was selected because it brings together various socioeconomic and cultural strata. The location of the survey in a municipality will provide the opportunity of designating it as demonstration site for the measurement of the impact of the future activities. The study was cross-sectional and descriptive, with a stratified multistage sampling, in 1397 subjects older than 19 years of age. The survey included an interview based on a questionnaire structured into 12 sections (identification, health status and family history, diabetes mellitus, hypertension, cholesterol, other chronic diseases, food consumption, tobacco, alcohol, physical activity, bodyweight and personal data); anthropometric measures (weight and height and waist and hip circumferences); blood pressure; and, biochemical analyses (Oral Glucose Tolerance Test, total, LDL and HDL cholesterol and Triglycerides).

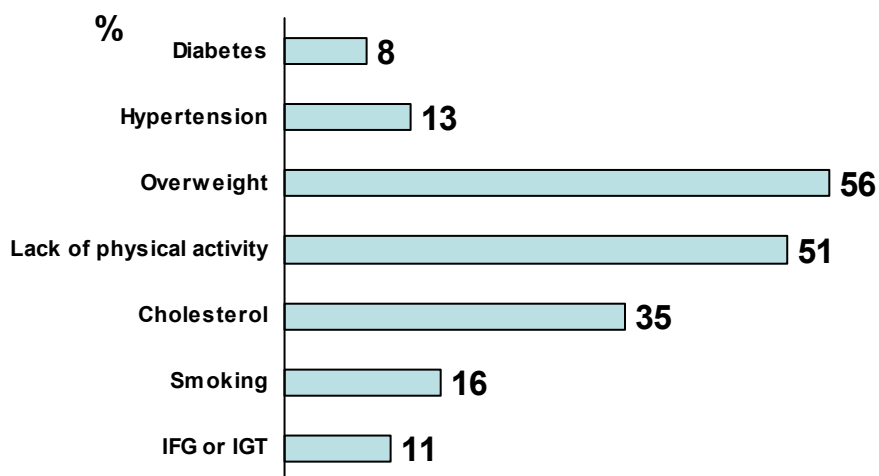
Main Results

The response rate was 53% and the biochemical test was performed with 74% of the participants. Of the total sample, 67% were women and 55% were less than 40 years old. All the following results were weighed in accordance with the population older than 19 years of age in Villa Nueva.

Overall, 8% of participants presented diabetes mellitus (includes previously diagnosed individuals, with fasting blood glucose equal or greater of 126 mg·dL or with 2h-OGTT equal or greater of 200 mg·dL.); and 13%, hypertension (includes previously diagnosed individuals or with blood pressure equal or greater of 140/90). The most common diabetes and hypertension risk factor was the excess weight (Body Mass Index of 25 kg·m² or more) 56%, followed by little physical activity (less than 150 minutes per week) 51%, hypercholesterolemia (blood cholesterol of 200 mg ·dL or more) 35%,

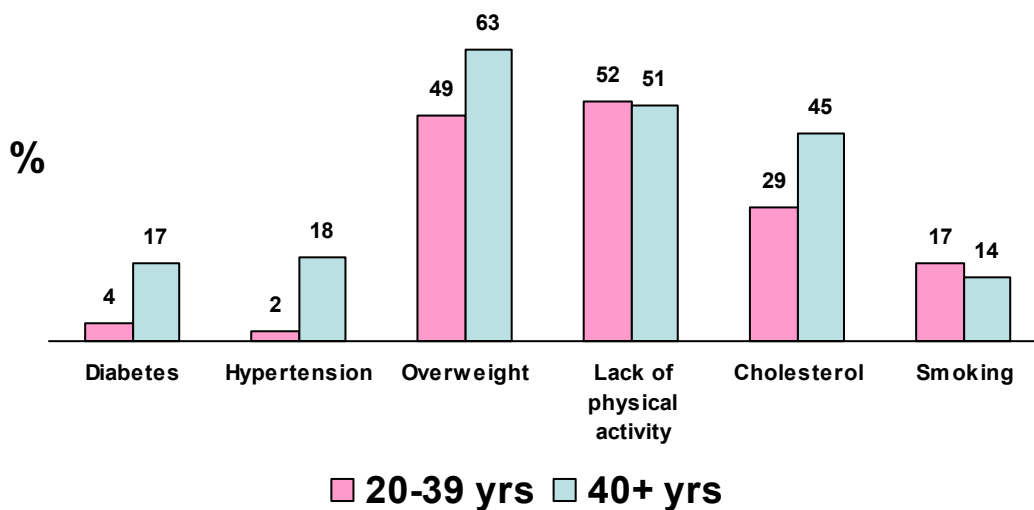
smoking (current smokers) 16% and Impair Glucose Tolerance (IGT) or Impair Fasting Glucose (IFG) (FBG of between 110 and 125 mg ·dL or 2H-OGTT between 140 and // 199 mg ·dL) 11%.

Prevalence of Diabetes, Hypertension and Their Risk Factors in Villa Nueva, Guatemala, 2003



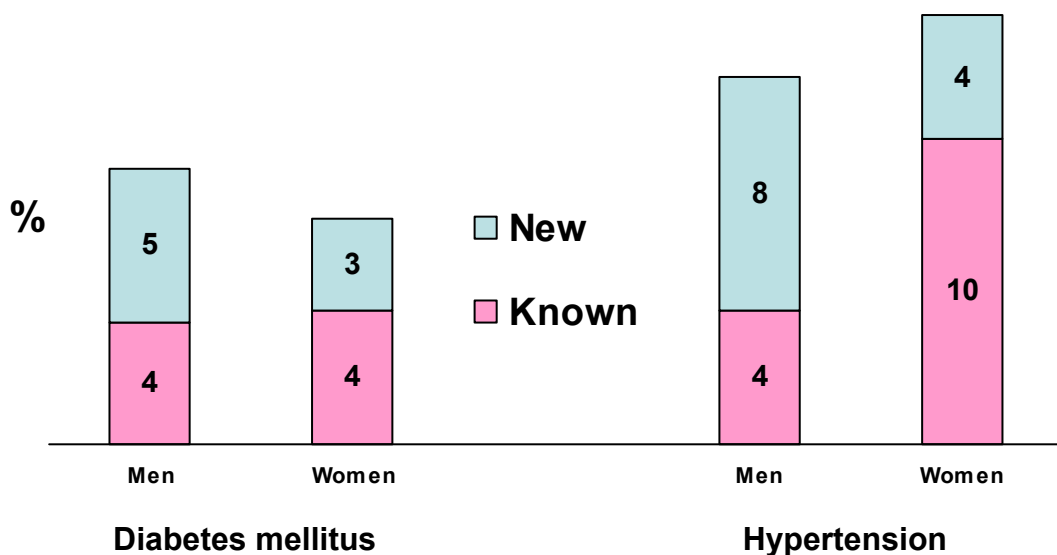
The diabetes-prevalence rate was four times higher—and that of hypertension, 9 times higher—in people 40 and over 40 than among those ages 20-39. Overweight and high cholesterol also increased with age. The frequency of a low level of physical activity affected both people of both age groups alike, and the prevalence of smoking was higher among the younger.

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Diabetes was more frequent among men (9%) than among women (7%). The proportion of undiagnosed diabetes was greater among men (56%) than among women (39%). This means that around 3 out of every 5 men and 2 out of every 5 women who had diabetes did not know they had it.

Prevalence of Diabetes and Hypertension by Gender in Villa Nueva, Guatemala, 2003



Hypertension was more frequent among women (14%) than among men (12%). The proportion of undiagnosed hypertensives was twice as great among men (63%) than among women (28%). This means that around 2 out of every 3 men and 1 out of every 3 women who had hypertension did not know they had it.

Conclusion

In conclusion, the prevalence rates for diabetes mellitus and hypertension detected in Villa Nueva are of great importance for public health in Guatemala, since, for example, the prevalence of diabetes found is similar to the rate reported in Mexico City (8.7%) and greater than the rates found in other cities of Latin America, such as La Paz, Bolivia (5.7%); Santiago, Chile (6.5%); Bogotá, Colombia (7.4%); and Asunción, Paraguay (6.5%). These results suggest that new types of actions are needed to prevent and control diabetes in Guatemala.