Hypertension prevalence, understanding, and management in rural Guanajuato, Mexico

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BACKGROUND

Elevated blood pressure, a major risk factor for stroke and cardiovascular disease, is a global health concern, estimated by the World Health Organization to cause 7.5 million deaths per year. Barriers to successful treatment of individuals with hypertension in Mexico include inadequate supply and high prices of antihypertensive drugs along with poor education about the disease. The intent of our study was to document poorly controlled hypertension in rural Mexico and investigate potential causes.

METHODS

• Blood pressure data were collected during health fairs in 32 rural communities in Guanajuato Mexico.
• All participants were invited to complete a survey. For those with blood pressure values in the hypertensive range and those with known hypertension, we asked additional questions about their understanding and management of elevated blood pressure.

RESULTS

• Of the 828 participants, the incidence of systolic blood pressure above 140 mmHg was 18%.
• Of those surveyed, 28% had a diagnosis of hypertension.
• Of the 216 participants with known hypertensive disease:
  • 46% had uncontrolled hypertension when measured at the health fair
  • 82% of the participants had their blood pressure measured within the last six months
  • 39% were not taking hypertensive medication
  • 26% stated that hypertensive medication was hard to obtain due to expense
• When asked to categorize a blood pressure value of 150/90 as normal, high, low or do not know:
  • 63% stated 150/90 was high
  • 28% did not know
  • 5% stated 150/90 was low
  • 4% stated 150/90 was a normal blood pressure value
• When asked about what they believed to be the cause of hypertension given four options:
  • 33% believed it to be caused by bad mood or mood changes (un estado de mal humor)
  • 28% believed it to be caused by the heart working harder to circulate blood throughout the body (cuando el corazón hace más esfuerzo para circular la sangre por el cuerpo)
  • 20% believed it to be caused by some traumatic event (un susto)
  • 19% believed it to be caused by excess sugar in the blood (un exceso de azúcar en la sangre)
• Of those surveyed, 16% were taking herbal remedies or natural supplements to help control their high blood pressure.
  • Herbs/natural supplements included: zapote blanco (white sapote), sábila (aloë), nopal cactus, chia, oats, millet, manzanilla (chamomile), cucumber, arnica, mispero (loquat)

DISCUSSION

• We found that almost half of the people with known hypertension did not have a controlled systolic blood pressure.
• Our survey data indicate that lack of education surrounding hypertension, low rates of antihypertensive use, and lack of access to prescribed medications because of price may be contributing to uncontrolled hypertension.
• Previous studies have shown that increasing knowledge and education about hypertension and healthy lifestyle modifications in Latino populations has been associated with better utilization of community resources and self-reported eating and exercise patterns.
• An education campaign around the causes and management of hypertension, which could include health care professionals as well, should be considered.

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REFERENCE
