

THE INCIDENCE OF HYPERTENSION  
IN GALE'S POINT, BELIZE, CENTRAL AMERICA

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**Purpose:** The purpose of this interdisciplinary project was to determine the incidence of hypertension in Gale's Point, Belize, Central America. Increased blood pressure currently causes 4.5% of the disease burden globally and is prevalent in many developing countries. Research supports that the mortality rate is mainly caused by diseases of the circulatory system and is often greater in males than females. There are three specific aims to this descriptive study. First, to compare the incidence of hypertension among men and women; secondly, to determine if differences exist in blood pressure readings between the different ethnic groups; and lastly, to determine risk factors, as identified by the American Heart Association, that may contribute to hypertension. **Method:** A health clinic was established in the local community center in Gale's Point, a remote village in Belize, C.A., by an interdisciplinary team of nursing, dental, medical, communication, public health students and faculty. A descriptive, comparative study was executed to gather data from adults, ages 18 and up, related to history of hypertension and current blood pressure readings. The sample consisted of 134 adults: 58 men and 76 women. The different ethnic groups represented were 113 Creoles, 3 Garifunas, 5 Mestizos, and 13 others (unidentified Spanish descent). A medical record was started and a physical exam was performed on each individual. History of hypertension and current systolic and diastolic blood pressures, as well as gender and other demographic factors were collected. The American Heart Association defines hypertension as a systolic blood pressure (SBP) reading above 140 mm Hg or a diastolic blood pressure (DBP) reading above 90 mm Hg. The criterion for pre-hypertension is a SBP reading of 120-139 mm Hg or a DBP reading of 80-89 mm Hg. **Findings:** This study shows that the incidence of hypertension is 43% of the total sample population. Meanwhile, 42.5% of the people are pre-hypertensive. Men are found to have higher SBP and DBP readings than women. In comparing the different ethnic groups, the Mestizos have higher blood pressure readings than the other ethnic groups. The risk factors identified that may contribute to hypertension are: obesity, smoking, alcohol intake, high cholesterol, and family history of hypertension, heart attack, chest pain, and diabetes. **Discussion:** Hypertension often leads to more complex health problems. It is currently unclear which risk factors are associated with hypertension in this population. Further analysis of this large database may elucidate a clearer picture of hypertension in this small, predominantly Creole village. Knowledge gained from this study establishes a significant need for future medical programs to target hypertension in adults by early screening and treatment. Since access to healthcare is problematic in many developing countries, health education on the preventative and primary measures is an affordable and effective way to fight hypertension.