Objective: Hypertension is an important risk factor for cardiovascular disease throughout the world. Little is known about the prevalence of hypertension in rural Haiti. Our study aims to estimate prevalence and knowledge of hypertension in Northern Haiti.

Design: Cross-sectional.

Setting: Four rural communities surrounding Milot, Haiti.

Participants: Participants (69 males, 106 females, 175 total) were eligible to take part if they were aged ≥18 years and not pregnant. Enrollment was voluntary.

Methods: Two initial blood pressure measurements were taken for each participant. Participants who had an average systolic blood pressure ≥140 mm Hg or diastolic blood pressure ≥90 mm Hg were instructed to return in 1 week for two additional confirmatory measurements. Based on these measures, participants were classified as either hypertensive or not. All participants were surveyed to assess their knowledge of hypertension.

Results: The prevalence of hypertension among the study sample was 36.6%. Overall, 47% of women and 21% of men were hypertensive. Approximately 30% of women of reproductive age (18–39 years) were hypertensive. Participants showed little knowledge of the asymptomatic nature of hypertension and the need for lifelong treatment.

Conclusions: Hypertension is prevalent in Haiti. The high prevalence of hypertension among women of reproductive age is a concern since it is a risk factor for cardiovascular disease. Lack of knowledge surrounding hypertension indicates low awareness of the condition and is a possible target for future educational interventions. (Ethn Dis. 2014; 24[2]:213–219)

Key Words: Hypertension, Haiti, Blood Pressure, Knowledge, Caribbean, Cardiovascular Disease, Awareness

INTRODUCTION

According to the World Health Organization (WHO), over 80% of cardiovascular disease (CVD) deaths take place in low- and middle-income countries. However, high quality data on the prevalence of risk factors for CVD are still lacking in many countries. Specific data on the prevalence and awareness of risk factors at the local level are needed to develop and implement CVD prevention programs. One of the most common risk factors for CVD is hypertension. Several studies of hypertension have been conducted in the Caribbean region (Barbados, Jamaica, and St. Lucia), although few have been conducted in Haiti. In 2004, 70% of CVD admissions to the Haiti State University Hospital were associated with hypertension, suggesting that hypertension is an important contributor to CVD in Haiti. Therefore, the purpose of our study was to determine the prevalence of hypertension, as well as to evaluate knowledge and awareness of hypertension in a Haitian community. This study was conducted in the area surrounding the town of Milot located in the Northern Department of Haiti.

METHODS

Study Population and Recruitment

Milot is a small town in Northern Haiti located 20 km southeast of Cap Haitien. It has a population of approximately 25,000 people and is surrounded by small agrarian communities. This study took place during June and July 2012. Participants were eligible to take part if they were aged ≥18 years and not pregnant. Enrollment was voluntary and records were kept confidential. Recruitment of participants was done with the help of local officials and community health care workers. All eligible participants were included. All participants gave oral informed consent; this study was approved by the Institutional Review Board of the Tufts Medical Center/Tufts University School of Medicine.

Overview of Study Visits

Following informed consent procedures, participant blood pressure was taken following the process described below. If the participant was found to have a high average blood pressure, he or she was asked to return for a second visit one week later at which time two more blood pressure readings were taken, and a second average blood pressure was calculated. Figure 1 shows the flow of the study visits.

Determination of Blood Pressure

Brachial blood pressure readings were taken on the right side with a manual blood pressure cuff while participants were seated with both feet on the ground. An average of two blood pressure readings taken at least five