Effect of Access to Care in Blood Pressure Management and Medication Adherence

INTRODUCTION

High blood pressure or hypertension is a chronic disease with many etiologies. People with chronic hypertension are at a higher risk for stroke, myocartial infarction, vision loss, and kidney failure, all of which are life threatening. Hypertension is often called a silent killer due to the insidious nature of development and frequent lack of physical symptoms in earlier stages. About 85 million Americans, one out of every three adults over age 20 have high blood pressure, nearly 1/5 of those afflicted are unaware they have the disease. The risk factors for developing hypertension are obesity, diabetes, poor diet, physical inactivity, and alcohol consumption. All of these factors disproportionately affect minorities and populations of lower socioeconomic status. Prevalence of high blood pressure in African-Americans in the United States is among the highest in the world. More than 40 percent of non-Hispanic African-American men and women have high blood pressure. For African-Americans, high blood pressure develops earlier in life and is usually more severe.

Medication adherence can be defined as the ability to accurately follow prescribed medical treatment, therefore not miss doses. To adequately follow treatment there is a necessary level of health literacy. Health literacy is the degree to which individuals have the capacity to obtain, understand, appraise, and implement health information in ways that promote and maintain health. It is estimated that 30-34 million adults in the United States fall into the lowest category of health literacy. Low health literacy is directly related to poor medication adherence.

SITE: COMMUNITY HEALTH CENTER OF WEST PALM BEACH

• Faith-Based Free Clinic
• Serves anyone residing in Palm Beach County, Florida
• Provides a myriad of services: Chronic Disease Management, Nutrition Counseling, Primary Care, Vision Clinic and Homeless Outreach
• Staff is largely volunteer based
• Serves 4,000 patients annually

STUDY QUESTION

Does access to care (BP monitor) and patient education effect medication adherence and blood pressure tracking of Community Health Center patients?

METHOD

Inclusion Criteria:
• Participants must have been previously diagnosed Hypertension
• Participants must have been prescribed medication to control their hypertension
• Participants must be under the age of 70
• Participants must be a Community Health Center Patient

Exclusion Criteria:
• Participants do not have medical documentation in their chart to prove diagnosis of hypertension
• Participants are older than 71
• Participants have pre-existing diagnosis of hypertension, however they have not filled their medication yet
• Participants do not have an email or phone number to follow up on results

Potential participants were identified during their drop-in visits at the Community Health Center. A chart review of each patient was done at the time of registration for their appointment. After consent was obtained, the study questionnaire was administered and a detailed demonstration of proper blood pressure monitor use was given.

RESULTS

Participant Demographics
• N=10, 6 Women and 4 Men
• Average age of 52.9 +/- 4.93
• 40% preferred Spanish as primary language

What numbers make up ideal BP?

• Correct Blood Pressure
• No Clue
• Systolic or Diastolic Correct
• 60% of patients had no clue of proper blood pressure numbers
• 2 out of the 10 participants correctly identified 120/80 as ideal blood pressure

RESULTS CONTINUED

How often do you take your Blood Pressure?

• Everyday 2-3x a week
• About once a week
• Never

BP Medication Adherence

• Greater than 50% of patients improved medication adherence

CONCLUSIONS

• This study shows there is a large role for patient education and access to care in the form of a blood pressure monitors, which can have an impact on patient medication adherence.
• Providing the tools to access health information and increase health literacy can have a positive impact on patient outcomes

ACKNOWLEDGMENTS

I would like to thank United Health Foundation/National Medical Fellowships Diverse Medical Scholars Program for allowing this research to be possible. All of the site personnel and staff at the Community Health Center of West Palm Beach, especially Mr. George Papdimitriou for his endless patience and support.