Non-Compliance With Medications Among Hypertensives in Ghana

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Introduction: Prevalence of hypertension in Ghana is estimated to be between 25.5 and 48% in urban areas. In spite of this growing burden of non-communicable disease, there has been limited research into hypertension treatment patterns or non-compliance rates. This study aims to understand the factors that influence patient compliance and treatment outcomes in this region.

Methods: 120 patients were recruited between Dec 2012 and Aug 2013 at Korle-Bu Hospital in Accra. Questionnaires that collected information on age, sex, religion, occupation, socioeconomic status, monthly blood pressure medication expenditures and house ownership were administered to eligible patients who agreed to participate in the study. The 8-item Morisky scale was used to assess non-compliance; the Patient Health Questionnaire-9 was used to assess depression; the Beliefs about Medication Questionnaire was used to assess patient views about medication, and the 14-item hypertension knowledge scale was used to assess patients’ knowledge about hypertension. The correlation coefficient was used to determine correlation between Morisky score and other patient variables.

Results: 27.73% of patients had controlled hypertension, with an average systolic BP of 151.57. The most commonly prescribed antihypertensive was a Calcium channel blocker, comprising 75% of patients. Several risk factors were revealed in the aggregate data that may help explain the poor BP control. Weight is a known risk factor for hypertension, and in this patient population the average BMI was 29.95, which is borderline between the overweight and obese categories. Psychosocial stress is also a known risk factor for hypertension, and a significant number of patients in this population met criteria for depressive disorder. Based on the PHQ-9 screening, 10.83% of patients met criteria for major depressive disorder, and 14.17% of patients met criteria for common depressive disorder. This study revealed 30.25% of patients to be non-compliant with medications, and 42.02% of patients to be moderately compliant with medications, which is a lower rate than in previous studies in the region. When correlation coefficients were determined between Morisky score and various other variables, the strongest correlation was found between compliance and depression score.

Conclusions: This study suggests that, in spite of treatment, hypertension is not adequately controlled within this population. Factors which may influence blood pressure control in this cohort include high rates of obesity, underlying depression, and non-compliance with medications.

Presenter’s Bio: Polina Krass is a second year medical student at the New York University School of Medicine. She received her undergraduate degree in Chemistry from Harvard in 2011.