Bahrain Medical Bulletin, Vol. 36, No. 3, September 2014

## **Blood Pressure Control and Predictors of Uncontrolled Hypertension**

Rashed Al Bannay, MD<sup>\*</sup> Aysha Husain, MD, MRCP<sup>\*\*</sup> Michael Böhm, MD, PhD<sup>\*\*\*</sup>

## ABSTRACT

Background: Improving blood pressure control requires the identification of covariates associated with uncontrolled hypertension.

**Objective:** To evaluate blood pressure control and predictors for uncontrolled hypertension.

**Design: A Cross-Sectional Study.** 

Setting: Cardiology Out-patient Department, Salmaniya Medical Complex.

Method: We documented personal factors, comorbidities, blood pressure measurements and the use of anti-hypertensive medications in 371 hypertensive patients from 1 January 2012 to 30 April 2012. Ordinal logistic regression was used to identify factors associated with poor blood pressure control.

Result: The mean age of the patients was  $54.6 \pm 11.8$  years. Two hundred forty-six (66.3%) patients had a mean blood pressure of <140/90; the rest had a mean blood pressure of >140/90. Age group 45-65 years, multidrug regimen, and poorly controlled diabetes were independent predictors of poor blood pressure control. Three hundred thirty-eight (91.1%) patients were on polytherapy receiving an average of three medications. The poorest blood pressure control was among diabetics, 207 (55.8%) and renal impairment patients 67 (18.1%).

Conclusion: The rate of BP control could be improved in the Cardiology Secondary Care Ambulatory Department. Most of the patients were on triple combination therapy. Diabetes and renal impairment are the main risk factors for poor blood pressure control.