

ORIGINAL RESEARCH

Devoid Knowledge and Low Adherence Precipitate Uncontrolled Blood Pressure: A Depiction From Cross-Sectional Study

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ABSTRACT

Objective • The present study was aimed to assess knowledge regarding disease, adherence to medication and blood pressure control among hypertensive patients.

Methods • A cross-sectional study involving 384 hypertensive patients attending a tertiary care, public sector hospital in Islamabad, Pakistan, was conducted. Data was collected by using Urdu versions of pre-validated hypertension knowledge questionnaire and Medication Adherence Scale by Morisky. Each patient's blood pressure was measured through a calibrated mercury sphygmomanometer. Data was analyzed statistically by using SPSS software version 21.0. Chi-square test was performed to determine association level among study variables. Mann-Whitney and Kruskal-Wallis tests were performed to assess for statistically significant differences of demographic variables with systolic BP and diastolic BP. Multiple regression was used to predict the impact of

two or more independent variables on dependent variable. *P* value of $<.05$ was considered to be significant.

Results • Mean (SD) systolic and diastolic blood pressures of 384 patients were 140.39 ± 15.485 and 88.74 ± 10.683 in mmHg respectively. The mean knowledge score was (13.26 ± 5.16) out of 22) and median score was 13. 103 (26.8%) of the patients had poor knowledge, whereas, 191 (49.7%) had moderate knowledge regarding hypertension with most of them at bottom line in the scale of moderate knowledge. The mean medication adherence score was (4.66 ± 2.743) out of 8), while 204 (53.1%) were categorized as poor adherent.

Conclusion • The current study concluded that knowledge regarding hypertension, adherence to treatment and blood pressure control among hypertensive patients was found poor. (*Altern Ther Health Med.* 2021;27(5):24-32).

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INTRODUCTION

Hypertension is the presence of a chronic elevation of systemic arterial pressure above a certain threshold value.¹ Most guidelines recommend that when a person's systolic blood pressure (BP) is ≥ 140 mmHg or their diastolic BP is ≥ 90 mmHg, or both, on repeated examination, then hypertension is diagnosed. The systolic BP is specifically important and is the basis for diagnosis in most of the patients. The two main types of hypertension include primary or essential hypertension and secondary hypertension.²

About ninety five percent of individuals with high BP have either primary or essential hypertension. The reason of essential hypertension is not known. At present, the environmental factors as well as genetic factors that act on regulation of BP are under study. Factors related to environment comprise increased intake of salt, obesity and possibly sedentary lifestyle. Some genetic factors include highly active renin-angiotensin aldosterone and sympathetic nervous systems and responsiveness to impact of dietary salt on BP. Another common reason of hypertension is