

Abstract

Background: Physicians highly recommend home blood pressure measurement (HBPM) to patients with hypertension in India with the expectation of being able to self-monitor their blood pressure. However, the HBPM rate among hypertensive patients is still low and it seems like the quality of the physicians' instructions varied due to multiple reasons. This study is aimed to investigate the association between the quality of physicians' instructions to patients and physicians' backgrounds in addition to the HBPM rate among hypertension patients in India.

Methods: A cross-sectional survey was conducted of 503 physicians who managed hypertensive patients in India between November 2019 and June 2021. The questionnaire focused on questions related to HBPM awareness, and instructions to patients. The association of the quality of physicians' instructions as binary (complete 8 instructions (consistent instructions) or 1-7 instructions) was investigated against 1) the physicians' background characteristics using logistic regression, and 2) physicians' perceived HBPM rate among their patients using the chi-square test. Informed consent was obtained from all participants by opt-out.

Results: The physicians who gave inconsistent instructions were from the age group of above 50 years [OR 0.60; 0.40-0.90, *P*-value 0.013], cardiologist [OR 0.42; 0.26-0.67, *P*-value < 0.001], working at clinics [OR 0.47; 0.30-0.74, *P*-value 0.001] and located in a state/union territory with a high ETL [OR 1.81; 1.11-2.94, *P*-value 0.017]. The quality of the physicians'

instructions was significantly associated with the HBPM rate among patients as the inconsistent instructions group showed a higher percentage of patients' HBPM rate below 50% compared to the consistent instructions group, and vice versa.

Conclusion: Our study revealed that the good quality of HBPM instructions by physicians is associated with their backgrounds and that it leads to an increase in HBPM rate among hypertensive patients. Consistent instructions to patients by physicians are important to increase HBPM rate and support hypertension management in India.

Keywords: Hypertension management, HBPM, Physician instructions to patients, India